DOCUMENT RESUME

ED 134 834 08 CE 010 079

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TITLE Determining Performance Levels of Competencies for Job Entry for Medical Assistants. Final Report.
INSTITUTION Mid-State Vocational, Technical, and Adult Education District, Wisconsin Rapids, Wis.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.; Wisconsin State Board of Vocational, Technical, and Adult Education, Madison.
BUREAU NO 14-004-151-226
PUB DATE Jun 76
NOTE 132p.

EDRS PRICE MF-$0.83 HC-$7.35 Plus Postage.
DESCRIPTORS Articulation (Program); Certification; Clinics; Graduates; Health Occupations Education; Job Analysis; *Job Skills; *Medical Assistants; Occupational Surveys; Physicians; Post Secondary Education; Questionnaires; Senior High Schools; *Task Analysis

ABSTRACT

For a study of the basic competencies required by medical assistants, an instrument was developed listing 92 competencies and 9 cognitive domain statements. Respondents were asked their opinion on the level of importance and level of proficiency needed for job entry for each competency. Instruments were mailed to 100 physicians, 102 clinics, and 212 medical assistant graduates. Usable responses came from 34 physicians, 45 clinics, and 80 graduates. Results revealed a generalization in necessary skills needed by assistants in a solo or two-man office and more specialization needed by assistants in a clinic atmosphere. The survey also determined the level of proficiency needed to perform these tasks. The medical assistant must do more with less supervision in the smaller office than in the clinic. It is recommended that further study be done on the following: Mandatory certification or licensure, articulation between high school and VTAE schools concerning specific course offerings in high school to eliminate the need for them in the vocational school medical assistant curriculum, and the refining of present competency lists and of existing programs to keep pace with changes in the field. It is also recommended that physicians be encouraged to employ people with proper credentials to work on human beings and to promote advanced training for their employes. The report contains tables presenting the importance ratings and proficiency levels for each item in the competency list. Also included are copies of cover letter, followup letter, and instruments sent to physicians, clinics, and graduates. (LAS)

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FINAL REPORT

Project No. 14-004-151-226

DETERMINING PERFORMANCE LEVELS OF COMPETENCIES FOR JOB ENTRY FOR MEDICAL ASSISTANTS

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June, 1976

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ACKNOWLEDGMENTS

Appreciation is extended to all those individuals who contributed to this project.

The list of contributors must include Mr. Roland Krogstad, Vocational Education Consultant, Research, and Mr. Joe Polansky, Vocational Education Consultant, Health Occupations. The Health Occupations Chairpersons and instructors from the Wisconsin VTAE Districts offering Medical Assistant programs were also most helpful. An extra thank you is extended to instructors Mrs. Dolores Cords from Gateway VTAE District, Mrs. Myrna Scheller from Mid-State VTAE District, and Mrs. Karen Earll, R.N., from the Marshfield Clinic who spent a day contributing to the final competency list. Mrs. Carol Prahl, M.A., from Appleton contributed valuable expertise from the medical assistant's point of view.

Many ancillary personnel such as secretaries, duplicating personnel, key punch and computer personnel were involved and without them the project could not have been completed as efficiently as it was.

Finally, gratitude is expressed to the physicians, clinic personnel, and graduates who responded to the questionnaire and made completion of this project possible.

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SUMMARY

A study of the basic competencies required by Medical Assistants was conducted at Mid-State Technical Institute from November, 1975 to June, 1976. An instrument was developed listing 92 competencies and 9 cognitive domain statements. The respondents were asked their opinion on the level of importance and level of proficiency of each competency.

One hundred physicians, 102 clinics and 212 Medical Assistant graduates were mailed the competency instrument.

Thirty-nine physicians, 47 clinics and 96 graduates responded. Of these responses, 34 were usable from physicians, 45 were usable from clinics and 80 were usable from graduates.

The survey revealed a generalization in necessary skills needed in the office of a solo or two-man office and a specialization in a clinic atmosphere.

The survey also determined the level of proficiency needed to perform these tasks. The Medical Assistant must do more with less supervision in the smaller office than in the clinic.

CHAPTER I

INTRODUCTION:

Today's health conscious society has placed increasing demands on physicians in carrying out their responsibilities. The efficient use of their day is hampered by the many tasks that are incidental to the practice of medicine. Increases in patient load and increased amounts of paper work in insurance and legal charts emphasize the need for more trained health personnel. Use of auxiliary people enable the doctor to serve more patients and spend a larger percentage of his time using his professional skills. This has resulted in an increased need for the Medical Assistant. The utilization of Medical Assistants to do many of the routine tasks that were normally performed by the physician or by other professionally trained persons will ultimately result in better health care. Health manpower shortages are expected to grow more acute; therefore, it is clear that the training and employment of auxiliary health care personnel is critical in alleviating these conditions. The number of Medical Assistants employed in the United States in 1970 was estimated at 170,000. In a manpower survey conducted by the Bureau of Labor Statistics (March, 1973) it was established that the projected average openings for the Medical Assistant in the United States up to 1980 would be 20,000 per year. These numbers are not absolute because the Medical Assistant is not licensed and may be trained on the job or in an educational institution.

The demand for quality medical care must be met by our educational institutions providing well trained personnel. In Wisconsin, it is the responsibility of the Vocational, Technical and Adult Education system to develop and offer programs which prepare the student to become an effective, contributing member of the health team.

The Medical Assistant program was initiated in Wisconsin as a one-year diploma program. The first program was developed in Madison in 1960. Since then nine more programs have been established throughout the state. Programs are run in small communities as well as in the large urban centers.

Medical Assistants are individuals who assist qualified physicians in their offices or other medical settings performing those administrative and/or clinical duties delegated in relation to the degree of training and in accord with respective state laws governing such actions and activities. The Medical Assistant is educated to be flexible and versatile. Her education and skills can be utilized in physicians offices, large clinics, hospitals and other allied medical entities. Medical assisting is a year round job. Eighty-five per cent of all health care takes place outside the hospital. With the demand from more than 200,000 physicians, there are and will probably continue to be almost unlimited opportunities for the graduate.

THE PROBLEM

The Medical Assistant occupation has been in transition for the past few years. Task and job competencies have not been clearly identified by the Wisconsin VTAE system, and these requirements must be incorporated into the institutional program. The program must enable the trainee to be adequately prepared for the occupation. A quality Medical Assistant program must be relevant to the current needs in the medical profession. The results of this survey will be studied with curriculum modification in mind. The strengths and weaknesses of the curriculum can be determined and changes can be according to the findings. The curriculum must be changed periodically to meet the needs of a changing society.

OBJECTIVES:

The primary objectives of this study are to determine:

1. The tasks that physicians believe to be within the range of duties for the Medical Assistant.
2. The order of importance for these competencies.
3. The level of proficiency needed for job entry.
4. The tasks that VTAE graduates who are now employed as Medical Assistants believe to be within the range of duties for the Medical Assistant.
5. The possible trend toward specialization.

REVIEW OF LITERATURE

The need for compiling a competency list for the medical assistant was kept in mind while the researcher reviewed books, pamphlets, curriculum guides and health occupations' reports. A definition of the medical assistant and the qualities she/he needs to work successfully in her/his field emerged from this review.

It was found that the medical assistant is more.than a career person. The position is full of variety, responsibility, and more importantly -- one in which she/he will serve humanity. Whether the Medical Assistant works in a physician's office, a hospital, or clinic, she/he will be the essential link between the physician, his patients and his professional associates. Her/his attitudes and manners reflect upon the physician's.

A dedicated medical assistant enjoys a personal satisfaction that cannot be measured in material wealth. CMA, Certified Medical Assistant, identifies her/him as a top-level medical assistant who has achieved the highest professional standards.

CHAPTER II

DESIGN AND DEVELOPMENT OF THE STUDY

The first phase of the Medical Assistant study was the preparation of a comprehensive task list of the activities that medical assistants perform. Instructors at the ten schools having the Medical Assistant program were contacted by telephone and asked to send the researcher a copy of their curriculum and skill inventory. Other references were used (See References). Personal and telephone interviews were conducted at clinics and hospitals in Marshfield, Stevens Point, Appleton, Milwaukee, and Eau Claire. Telephone interviews were found to be very effective. Doctors, nurses, clinic business managers and hospital personnel managers were more reluctant to take the time for personal interviews than spending time on the telephone. The telephone responses were very pleasant and most helpful.

During the development of the instrument it became apparent that Medical Assistants are involved in two broad catagories of responsibiiities. The first catagory includes clerical, secretarial, office management and business functions. The second category embraces clinical, laboratory and technical activities.

The list of activities which the Medical Assistant might perform became extremely long. It was apparent that the list had to be assimilated to a reasonable length. The respondents -- physicians, clinic personnel and graduates -- are extremely busy people and would not respond at all if the questionnaire were too complicated or too lengthy.

A meeting of two instructors, clinic personnel and the researcher was held in January to review the competencies and offer suggestions for additions and

deletions. The meeting was most productive, and as a result a final competency list consisting of 92 skills and 9 cognitive domain statements was compiled.

The instrument list was then presented to a random group of Medical Assistants at an American Association of Medical Assistants meeting in Watertown, Wisconsin. Response to the instrument was positive. A pilot study was completed by 13 Medical Assistants at the Marshfield Clinic to ascertain if the survey posed any problems in answering. The comments on the construction were favorable. The instrument was easy to read and took about 15 minutes.

The final survey instrument was sent out March 1, 1976.

DESCRIPTION OF INSTRUMENT

The questionnaire form was constructed in two parts. The first part was designed to obtain information about the importance of the tasks, and the second part was designed to obtain information about the proficiency needed to perform the tasks.

The questions were posed with choices of responses. The respondent was to place an "X" in the blank under the response which in his opinion gave the level of importance and the level of proficiency. Ninety-two competencies were listed. Nine cognitive domain statements were made and their importance was to be determined also.

The final form designated five levels of importance. A 5-point Likert scale was used. Five points were awarded for each Extremely Important response, four points for Very Important, three points for Important, two points for Moderately Important and one point for Not Important.

There were five levels of proficiency, as the 5-point Likert scale was used here also. Five points were awarded for each Can lead others, four points for Without supervision, three points for Limited supervision, two points for Constant supervision and one point for Assists others. A copy of the instrument is on pages 9-17.

NUMBER OF INSTRUMENTS SENT AND RETURNED

A competency list survey was sent to a random selection of 100 physicians and 102 clinics located throughout Wisconsin. The survey was also sent to 212 graduates (1974 and 1975) of the Medical Assistant programs established in the state who are now employed in their field. Hospitals were not included in this survey because they do not have a need for the specific services of the trained medical assistant.

TABLE I

Number of Survey Instruments Sent to Physicians, Clinics and Medical Assistant Graduates and Number of Returns

Type of Survey Recipient	Number of Instruments Sent	Number of Instruments Returned	Number of Usable Instruments	% of Returned Instruments
Physicians - Solo or 2-man office	100	39	34	39%
Clinics - 3 or more physicians	102	47	45	46%
Medical Assistant Grads-1974-1975	212	96	80	45%

Approximately 13% of the total number of instruments returned were not usable for various reasons such as:

1. Physicians - retirement or death
2. Graduates - not employed in the field
3. Graduates - not working at present time
4. Clinics - do not now employ and will not hire a Medical Assistant in the future

MEDICAL ASSISTANT COMPETENCY SURVEY

NAME OF YOUR HEALTH AGENCY _____

ADDRESS OF YOUR HEALTH AGENCY _____

POSITION OF PERSON COMPLETING THE QUESTIONNAIRE _____

YOUR NAME _____

In your opinion to what extent are the following competencies important to the Medical Assistant in your office/clinic. Also, what is the degree of proficiency needed to perform these tasks.

CLERICAL, SECRETARIAL, MANAGERIAL	Level of Importance: Please indicate by placing an X in one of the columns						Level of Proficiency: Please indicate by placing an X in one of the columns					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Answer telephone - place necessary calls												
Make appointments - cancel and reschedule appointments												
Greet patients - personalizing approach												
Interview and complete forms - start file for new patients - obtain necessary signatures for insurance												
Explain delays												
Review day's schedule with the physician												

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Make arrangements for hospital admittance - schedule surgeries											
Transcribe medical information to insurance forms											
Open and sort mail											
File medical records, EKG-ECG tracings, X-ray reports											
Maintain patient's medical records											
Receive and organize sample supplies											
Prepare and replenish supplies in physician's bag											
Operate business machines											
Receive and screen visitors and salesman											
Maintain proper housekeeping											
Maintain inventory of medical supplies, medications, and office supplies											
Maintain operating condition of medical and clerical equipment											
Maintain an office procedure manual											
Conduct orientation of new personnel											

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Prepare statistical reports											
Conduct library search for physician											
Prepare charge slips for patients											
Complete insurance forms for billing											
Make financial arrangements with patient and physician											
Collect payments at time of visit											
Mail bills to patients											
Post payments received											
Make bank deposits - balance account											
Maintain petty cash fund											
Maintain accounts receivable and accounts payable											
Prepare checks for physician's signature											
Prepare and maintain employee's payroll record											
Meet with doctor to discuss office problems/concerns											
Compose and type business letters											

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Possess basic typing ability											
Make travel and housing arrangements											

DIAGNOSTIC TESTS AND PROCEDURES

Instruct patient regarding proper preparation for tests ordered by the physician												
Collect and/or instruct patient with regard to correct method of specimen collection												
Take proper care of collected specimen												
Send specimen to laboratory												
Perform tests for physical and chemical properties of urine												
Examine specimen microscopically												
Collect venous and capillary blood												
Prepare blood smears												

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Perform the following laboratory procedures:											
a. Differential Cell Count											
b. Sedimentation Rate											
c. Hematocrit and Hemoglobin											
d. Gram Stain											
e. Blood Sugar											
f. Prothrombin Time											
Clean, wrap and sterilize equipment, instruments and supplies											
Handle and store sterilized material											
Prepare, instruct and assist patient for EKG-ECG											
Take EKG-ECG readings											
Operate and maintain EKG-ECG machine											
Position and prepare patient for X-ray											
Take X-ray											
Develop X-ray											

EXAMINATION AND TREATMENT ROOM PROCEDURES	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Maintain adequate supplies in examination and treatment room											
Prepare basic equipment and supplies for routine physical examination											
Receive patient with personal approach											
Direct or assist patient with gowning and draping											
Position patient for diagnostic and/or treatment procedures and explain why they are necessary											
Take and record vital signs and height and weight											
Assist with minor surgery using sterile techniques											
Prepare equipment for special procedures, e.g. Procto - Bone Marrow - Lumbar puncture											
Dispose of contaminated and disposable items											
Perform the following procedures:											
a. Enemas											
b. O_2 administration											
c. Nose and throat spray											

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTANCE ONLY	
d. Cast removal												
e. Proper bandaging												
f. Apply topical medications												
Assist with the following procedures:												
a. Proctoscopy												
b. Pelvic exam with smear or biopsy												
c. Lumbar puncture												
d. Bone marrow aspiration and/or biopsy												
e. Paracentesis												
f. Thoracentesis												
g. Casting												
Prepare and give injections under the direct supervision of the physician												
a. Immunization												
b. Allergy												

	Level of Importance					Level of Proficiency				
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS
c. Vitamin										
Give medications as directed by the physician										
Check eyes using the Snellen Chart										
Test for color blindness										
Review physician's instructions with the patient										
Telephone prescriptions to pharmacy										
Observe the physical characteristics of patient										
Maintain a safe and controlled office environment										
Maintain a quality control of reagents										

CHECK THE LEVEL OF IMPORTANCE OF THE FOLLOWING STATEMENTS FOR THE MEDICAL ASSISTANT

	Level of Importance					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	
Know business English						
Know medical terminology						
Know how to use the PDR						
Know medical law and ethics as pertains to the Medical Assistant						
Know body structure and function						
Know the common diseases and their effects on the body						
Know First Aid and Emergency procedures for OSHA (Occupational Safety and Health Act) requirements						
Have a working knowledge of the metric system						
Stay within the limits of her training						

Comments and/or Additions:

CHAPTER III

Results:

Tables II, III and IV present the findings for the Level of Importance for each of the 92 competencies as determined by physicians, clinics, and graduates.

Tables V, VI and VII present the findings for the Level of Proficiency for each of the 92 competencies as determined by physicians, clinics, and graduates.

Tables VIII, IX and X present the findings for the Level of Importance for each of the competencies listed in the three catagories as determined by physicians, clinics and graduates.

Tables XI, XII and XIII present the findings for the Level of Proficiency for each of the competencies listed in the three catagories as determined by physicians, clinics and graduates.

Table XIV presents the findings for the Level of Importance and the Level of Proficiency of the 92 competencies according to the responses of the three populations.

Tables XV and XVI present the findings for the Level of Importance of the 9 cognitive domain statements according to the three populations.

Comments

Following Table XVI comments by physicians, clinic personnel and granduates are noted.

TABLE II

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE FOR EACH OF THE NINETY-TWO COMPETENCIES AS DETERMINED BY PHYSICIANS

(1)*	4.68**	Answer telephone--place necessary calls
(2)	4.41	Make appointments--cancel and reschedule appointments
(3)	4.29	Greet patients--personalizing approach
(4)	4.12	Receive patient with personal approach
(5)	4.06	Transcribe medical information to insurance forms
(6)	4.03	Complete insurance forms for billing
(8)	3.97	Make bank deposits--balance account
(8)	3.97	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(8)	3.97	Handle and store sterilized material
(10)	3.96	Instruct patient regarding proper preparation for tests ordered by the physician
(11)	3.88	Maintain accounts receivable and accounts payable
(12)	3.83	Clean, wrap and sterilize equipment, instruments and supplies
(14)	3.82	Collect and/or instruct patient with regard to correct method of specimen collection
(14)	3.82	Prepare charge slips for patients
(14)	3.82	Maintain adequate supplies in examination and treatment room
(16)	3.79	Possess basic typing ability
(17)	3.78	Maintain a safe and controlled office environment
(18.5)	3.76	Post payments received
(18.5)	3.76	Take proper care of collected specimen
(20)	3.75	Position and prepare patient for X-ray
(21)	3.72	Prepare basic equipment and supplies for routine physical examination
(23)	3.68	Perform tests for physical and chemical properties of urine
(23)	3.68	Explain delays
(23)	3.68	Prepare and give injections under the direct supervision of the physician--Immunization
(25)	3.67	Prepare checks for physician's signature
(26)	3.65	Maintain patient's medical records
(27)	3.61	Make financial arrangements with patient and physician
(28.5)	3.59	Prepare and give injections under the direct supervision of the physician--Allergy
(28.5)	3.59	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(30)	3.58	Prepare and maintain employee's payroll record
(31)	3.56	Meet with doctor to discuss office problems/concerns
(32)	3.55	Assist with minor surgery using sterile techniques
(34)	3.53	Send specimen to laboratory
(34)	3.53	File medical records, EKG-ECG tracings, X-ray reports
(34)	3.53	Mail bills to patients
(36.5)	3.50	Take and record vital signs and height and weight
(36.5)	3.50	Direct or assist patient with gowning and draping
(38)	3.47	Maintain inventory of medical supplies, medications, and office supplies
(39)	3.46	Take X-ray
(40)	3.45	Assist with the following procedure--Pelvic examination with smear or biopsy
(41)	3.43	Give medications as directed by physician
(42.5)	3.41	Maintain operating condition of medical and clerical equipment
(42.5)	3.41	Collect payments at time of visit
(44)	3.40	Develop X-ray
(45.5)	3.38	Maintain proper housekeeping
(45.5)	3.38	Compose and type business letters
(47.5)	3.35	Operate business machines
(47.5)	3.35	Make arrangements for hospital admittance--schedule surgeries

(49)	3.32	Take EKG-ECK readings
(50)	3.28	Dispose of contaminated and disposable items
(51.5)	3.26	Maintain petty cash fund
(51.5)	3.26	Collect venous and capillary blood
(53)	3.25	Prepare, instruct and assist patient for EKG-ECG
(54)	3.24	Review physician's instructions with the patient
(55)	3.22	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(56)	3.21	Operate and maintain EKG-ECG machine
(57.5)	3.17	Perform the following procedure--Proper bandaging
(57.5)	3.17	Telephone prescriptions to pharmacy
(60.5)	3.15	Perform the following laboratory procedure--Sedimentation Rate
(60.5)	3.15	Prepare blood smears
(60.5)	3.15	Examine specimen microscopically
(60.5)	3.15	Receive and screen visitors and salesmen
(63)	3.13	Maintain a quality control of reagents
(64)	3.12	Perform the following laboratory procedure--Blood Sugar
(65.5)	3.07	Check eyes using the Snellen Chart
(65.5)	3.07	Observe the physical characteristics of patient
(67)	3.06	Conduct orientation of new personnel
(68.5)	3.03	Test for color blindness
(68.5)	3.03	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(70.5)	3.00	Perform the following procedure--Apply topical medications
(70.5)	3.00	Open and sort mail
(72)	2.97	Review day's schedule with the physician
(73)	2.96	Perform the following laboratory procedure--Gram Stain
(74)	2.85	Perform the following laboratory procedure--Differential Cell Count
(75)	2.81	Prepare and give injections under the direct supervision of the physician--Vitamin
(76)	2.76	Maintain an office procedure manual
(77)	2.64	Assist with the following procedure--Casting
(78)	2.61	Assist with the following procedure--Proctoscopy
(79)	2.56	Assist with the following procedure--Lumbar puncture
(80)	2.48	Perform the following laboratory procedure--Prothrombin Time
(81.5)	2.42	Assist with the following procedure--Paracentesis
(81.5)	2.42	Assist with the following procedure--Thoracentesis
(83)	2.38	Prepare statistical reports
(84)	2.36	Make travel and housing arrangements
(85)	2.24	Prepare and replenish supplies in physician's bag
(86)	2.23	Perform the following procedure--Cast removal
(87)	2.21	Receive and organize sample supplies
(88)	2.12	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(89)	2.10	Perform the following procedure--O_2 administration
(90)	1.89	Perform the following procedure--Nose and throat spray
(91)	1.84	Conduct library search for physician
(92)	1.76	Perform the following procedure--Enemas

* Rank Order

** Mean response on a 5-point Likert Scale

TABLE III

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE FOR EACH OF THE NINETY-TWO COMPETENCIES AS DETERMINED BY CLINICS

(1)*	4.67**	Greet patients--personalizing approach
(2)	4.47	Receive patient with personal approach
(3)	4.27	Answer telephone--place necessary calls
(4)	4.16	Take and record vital signs and height and weight
(5)	4.07	Take proper care of collected specimen
(6)	4.05	Direct or assist patient with gowning and draping
(7)	4.04	Prepare basic equipment and supplies for routine physical examination
(8)	4.00	Collect and/or instruct patient with regard to correct method of specimen collection
(10)	3.98	Clean, wrap and sterilize equipment, instruments and supplies
(10)	3.98	Handle and store sterilized material
(10)	3.98	Maintain adequate supplies in examination and treatment room
(12.5)	3.95	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(12.5)	3.95	Instruct patient regarding proper preparation for tests ordered by the physician
(14)	3.93	Make appointments--cancel and reschedule appointments
(15)	3.87	Explain delays
(16)	3.85	Send specimen to laboratory
(17)	3.84	Dispose of contaminated and disposable items
(18)	3.71	Prepare charge slips for patients
(19)	3.70	Assist with the following procedure--Pelvic exam with smear or biopsy
(20)	3.67	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(21)	3.63	Assist with minor surgery using sterile techniques
(22)	3.60	Review physician's instructions with the patient
(23)	3.59	Maintain a safe and controlled office environment
(24)	3.51	Maintain patient's medical records
(25)	3.50	Check eyes using the Snellen Chart
(26)	3.44	Observe the physical characteristics of patient
(27)	3.42	Prepare, instruct and assist patient for EKG/ECG
(28)	3.41	Perform the following procedure--Proper bandaging
(29)	3.36	Maintain proper housekeeping
(30)	3.34	Assist with the following procedure--Proctoscopy
(32)	3.32	File medical records, EKG/ECG tracings, X-ray reports
(32)	3.32	Make arrangements for hospital admittance--schedule surgeries
(32)	3.32	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(34)	3.29	Test for color blindness
(35)	3.26	Assist with the following procedure--Casting
(36)	3.20	Maintain inventory of medical supplies, medications, and office supplies
(37)	3.14	Transcribe medical information to insurance forms
(38)	3.13	Give medications as directed by the physician
(39)	3.11	Prepare and give injections under the direct supervision of the physician--Immunization
(40)	3.09	Possess basic typing ability
(41)	3.05	Telephone prescriptions to pharmacy
(42)	2.97	Operate and maintain EKG/ECG machine
(43)	2.89	Complete insurance forms for billing
(44)	2.88	Perform the following procedure--Apply topical medications
(45)	2.85	Prepare and give injections under the direct supervision of the physician--Allergy
(46)	2.82	Perform the following procedure--Enemas
(47)	2.81	Maintain operating condition of medical and clerical equipment

(48.5)	2.77	Take EKG/ECG readings
(48.5)	2.77	Perform the following procedure--Cast removal
(50)	2.75	Compose and type business letters
(51)	2.74	Collect payments at time of visit
(52)	2.72	Perform tests for physicial and chemical properties of urine
(53)	2.71	Prepare and give injections under the direct supervision of the physician--Vitamin
(54.5)	2.70	Assist with the following procedure--Paracentesis
(54.5)	2.70	Meet with doctor to discuss office problems/concerns
(56)	2.66	Maintain a quality control of reagents
(57)	2.61	Perform the following procedure--O_2 administration
(58)	2.60	Conduct orientation of new personnel
(59)	2.58	Assist with the following procedure--Thoracentesis
(60.5)	2.56	Review day's schedule with the physician
(60.5)	2.56	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(62.5)	2.50	Receive and screen visitors and salesmen
(62.5)	2.50	Assist with following procedure--Lumbar Puncture
(64)	2.49	Prepare and replenish supplies in physician's bag
(65)	2.47	Examine specimen microscopically
(66.5)	2.42	Post payments received
(66.5)	2.42	Collect venous and capillary blood
(68)	2.41	Operate business machines
(69)	2.36	Position and prepare patient for X-ray
(70.5)	2.35	Perform the following procedure--Nose and throat spray
(70.5)	2.35	Maintain accounts receivable and accounts payable
(72)	2.32	Make bank deposits--balance account
(73)	2.27	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(74)	2.20	Open and sort mail
(75)	2.18	Prepare blood smears
(76)	2.17	Prepare and maintain employee's payroll record
(77)	2.16	Mail bills to patients
(78)	2.05	Maintain an office procedure manual
(79)	2.04	Receive and organize sample supplies
(80)	2.03	Prepare checks for physician's signature
(81)	2.00	Develop X-ray
(82.5)	1.97	Perform the following laboratory procedure--Sedimentation Rate
(82.5)	1.97	Perform the following laboratory procedure--Blood Sugar
(84)	1.95	Make financial arrangements with patient and physician
(85.5)	1.94	Perform the following laboratory procedure--Gram Stain
(85.5)	1.94	Take X-ray
(87)	1.92	Maintain petty cash fund
(88)	1.91	Perform the following laboratory procedure--Differential Cell Count
(89)	1.72	Perform the following laboratory procedure--Prothrombin Time
(90)	1.66	Prepare statistical reports
(91)	1.64	Make travel and housing arrangements
(92)	1.50	Conduct library search for physician

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE IV

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE FOR EACH OF THE NINETY-TWO COMPETENCIES AS DETERMINED BY GRADUATES

(1)*	4.55**	Greet patients--personalizing approach
(2)	4.47	Receive patient with personal approach
(3)	4.31	Answer telephone--place necessary calls
(4.5)	4.22	Maintain adequate supplies in examination and treatment room
(4.5)	4.22	Prepare basic equipment and supplies for routine physical examination
(6)	4.15	Take and record vital signs and height and weight
(7)	4.12	Collect and/or instruct patient with regard to correct method of specimen collection
(8)	4.11	Instruct patient regarding proper preparation for tests ordered by the physician
(9)	4.09	Maintain a safe and controlled office environment
(10)	4.06	Take proper care of collected specimen
(11)	4.05	Direct or assist patient with gowning or draping
(12)	4.03	Review physician's instructions with the patient
(13)	4.01	Handle and store sterilized materials
(14.5)	3.97	Dispose of contaminated and disposable items
(14.5)	3.97	Send specimen to laboratory
(16)	3.96	Assist with minor surgery using sterile techniques
(17)	3.94	Clean, wrap, and sterilize equipment, instruments and supplies
(18)	3.92	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(19)	3.87	Maintain patient's medical records
(20)	3.86	Explain delays
(21)	3.77	Maintain inventory of medical supplies, medication, and office supplies
(22.5)	3.72	Assist with the following procedure--Pelvic exam with smear or biopsy
(22.5)	3.72	Maintain proper housekeeping
(24)	3.61	Telephone prescriptions to pharmacy
(25)	3.57	Observe the physical characteristics of patient
(26)	3.55	Prepare equipment for special procedures, e.g., Procto-Bone Marrow-Lumbar puncture
(27)	3.52	Make appointments--cancel and reschedule appointments
(28)	3.46	Prepare charge slips for patients
(29)	3.44	Give medications as directed by physician
(30)	3.41	File medical records, EKG-ECG tracings, X-ray reports
(31.5)	3.39	Possess basic typing ability
(31.5)	3.39	Check eyes with Snellen Chart
(33)	3.31	Make arrangements for hospital admittance-schedule surgeries
(34)	3.29	Maintain operating condition of medical and clerical equipment
(35)	3.28	Perform the following procedure--Proper bandaging
(36)	3.23	Perform tests for physical and chemical properties of urine
(37)	3.21	Maintain a quality control of reagents
(38.5)	3.19	Prepare and give injections under the direct supervision of the physician--Immunization
(38.5)	3.19	Prepare, instruct and assist patient for EKG-ECG
(40)	3.16	Interview and complete forms-start file for new patients-obtain necessary signatures for insurance
(41)	3.13	Receive and screen visitors and salesmen
(42)	3.10	Perform the following procedure--Apply topical medications
(43)	2.96	Assist with the following procedure--Proctoscopy
(44.5)	2.92	Meet with doctor to discuss office problems/concerns
(44.5)	2.92	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(45.5)	2.91	Collect venous and capillary blood
(44.5)	2.91	Operate business machines
(48)	2.89	Prepare and give injections under the direct supervision of the physician--Vitamin

(49)	2.88	Prepare and give injections under the direct supervision of the physician--Allergy
(50.5)	2.87	Operate and maintain EKG-ECG machine
(50.5)	2.87	Take EKG-ECG readings
(52)	2.84	Test for color blindness
(53)	2.82	Review day's schedule with the physician
(54)	2.81	Perform the following procedure--Enemas
(55)	2.75	Conduct orientation of new personnel
(56)	2.73	Complete insurance forms for billing
(57)	2.69	Examine specimen microscopically
(58)	2.67	Perform the following laboratory procedure--Blood Sugar
(59.5)	2.63	Transcribe medical information to insurance form
(59.5)	2.63	Maintain an office procedure manual
(61)	2.61	Prepare blood smear
(62)	2.57	Compose and type business letters
(63)	2.53	Receive and organize sample supplies
(64)	2.51	Open and sort mail
(65)	2.46	Post payments received
(66)	2.45	Prepare the following laboratory procedure--Differential Cell Count
(67)	2.44	Prepare the following laboratory procedure--Sedimentation Rate
(68)	2.41	Perform the following procedure--O_2 administration
(69)	2.40	Assist with the following procedure--Casting
(70)	2.38	Mail bills to patients
(71)	2.37	Make bank deposits--balance account
(72)	2.35	Perform the following laboratory procedure--Gram stain
(73)	2.34	Position and prepare patient for X-ray
(74.5)	2.31	Perform the following laboratory procedure--Prothrombin time
(74.5)	2.31	Maintain accounts receivable and accounts payable
(76)	2.23	Make financial arrangements with patient and physician
(77.5)	2.19	Prepare and replenish supplies in physician's bag
(77.5)	2.19	Perform the following procedure--Cast removal
(79)	2.18	Perform the following procedure--Nose and throat spray
(80)	2.17	Take X-ray
(81.5)	2.11	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(81.5)	2.11	Maintain petty cash fund
(83.5)	2.10	Assist with the following procedure--Lumbar puncture
(83.5)	2.10	Collect payments at time of visit
(85.5)	2.09	Prepare checks for physician's signature
(85.5)	2.09	Develop X-ray
(88)	2.08	Prepare statistical reports
(88)	2.08	Assist with the following procedure--Paracentesis
(88)	2.08	Assist with the following procedure--Thoracentesis
(90)	1.94	Prepare and maintain employee's payroll record
(91.5)	1.74	Make travel and housing arrangements
(91.5)	1.74	Conduct library search for physician

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE V

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF PROFICIENCY FOR EACH OF THE NINETY-TWO COMPETENCIES AS DETERMINED BY PHYSICIANS

(1)*	3.79**	Greet patients--personalizing approach
(2)	3.65	Make appointments--cancel and reschedule appointments
(3)	3.64	Maintain adequate supplies in examination and treatment room
(4)	3.62	Answer telephone--place necessary calls
(5)	3.55	Receive patient with personal approach
(6)	3.54	Collect and/or instruct patient with regard to correct method of specimen collection
(7)	3.53	Possess basic typing ability
(8)	3.50	Prepare basic equipment and supplies for routine physical examination
(9.5)	3.48	Handle and store sterilized material
(9.5)	3.48	Take proper care of collected specimen
(12.5)	3.47	Maintain proper housekeeping
(12.5)	3.47	Clean, wrap and sterilize equipment, instruments and supplies
(12.5)	3.47	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(12.5)	3.47	Direct or assist patient with gowning and draping
(15)	3.44	Explain delays
(16)	3.41	Collect payments at time of visit
(19.5)	3.38	Take and record vital signs and height and weight
(19.5)	3.38	Meet with doctor to discuss office problems/concerns
(19.5)	3.38	File medical records, EKG-ECG tracings, X-ray reports
(19.5)	3.38	Observe the physical characteristics of patient
(19.5)	3.38	Test for color blindness
(19.5)	3.38	Instruct patient regarding proper preparation for tests ordered by the physician
(23)	3.35	Receive and screen visitors and salesmen
(24.5)	3.32	Operate business machines
(24.5)	3.32	Mail bills to patients
(26)	3.31	Maintain a safe and controlled office environment
(27)	3.30	Send specimen to laboratory
(29)	3.29	Maintain patient's medical records
(29)	3.29	Maintain operating condition of medical and clerical equipment
(29)	3.29	Make bank deposits--balance account
(32)	3.26	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(32)	3.26	Maintain accounts receivable and accounts payable
(32)	3.26	Maintain petty cash fund
(34)	3.24	Post payments received
(35)	3.23	Check eyes using the Snellen Chart
(36)	3.21	Transcribe medical information to insurance forms
(37)	3.19	Dispose of contaminated and disposable items
(38.5)	3.18	Perform tests for physical and chemical properties of urine
(38.5)	3.18	Prepare and maintain employee's payroll record
(41.5)	3.15	Make financial arrangements with patient and physician
(41.5)	3.15	Prepare checks for physician's signature
(41.5)	3.15	Prepare charge slips for patients
(41.5)	3.15	Complete insurance forms for billing
(44.5)	3.14	Review physician's instructions with the patient
(44.5)	3.14	Position and prepare patient for X-ray
(46.5)	3.12	Compose and type business letters
(46.5)	3.12	Maintain inventory of medical supplies, medications and office supplies
(48)	3.06	Conduct orientation of new personnel
(49.5)	2.97	Perform the following procedure--Proper bandaging
(49.5)	2.97	Open and sort mail

(51)	2.94	Make arrangements for hospital admittance--schedule surgeries
(52.5)	2.93	Prepare and give injections under the direct supervision of the physician--Immunization
(52.5)	2.93	Develop X-ray
(54)	2.90	Prepare and give injections under the direct supervision of the physician--Allergy
(55)	2.88	Review day's schedule with the physician
(56)	2.85	Maintain an office procedure manual
(57)	2.84	Assist with minor surgery using sterile techniques
(58)	2.81	Examine specimen microscopically
(59)	2.79	Take X-ray
(60.5)	2.75	Perform the following procedure--Apply topical medications
(60.5)	2.75	Give medications as directed by the physician
(62.5)	2.71	Receive and organize sample supplies
(62.5)	2.71	Operate and maintain EKG-ECG machine
(64)	2.64	Take EKG-ECG readings
(65)	2.63	Telephone prescriptions to pharmacy
(66.5)	2.61	Make travel and housing arrangements
(66.5)	2.61	Prepare, instruct and assist patient for EKG-ECG
(68)	2.60	Maintain a quality control of reagents
(69.5)	2.59	Collect venous and capillary blood
(69.5)	2.59	Assist with the following procedure--Pelvic exam with smear or biopsy
(71.5)	2.52	Prepare and give injections under the direct supervision of the physician--Vitamin
(71.5)	2.52	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(73)	2.50	Prepare blood smears
(74)	2.48	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(75)	2.46	Perform the following laboratory procedure--Sedimentation Rate
(76)	2.31	Perform the following laboratory procedure--Blood Sugar
(77)	2.27	Prepare and replenish supplies in physician's bag
(78)	2.25	Assist with the following procedure--Proctoscopy
(79)	2.24	Perform the following laboratory procedure--Gram Stain
(80)	2.22	Prepare statistical reports
(81)	2.12	Perform the following laboratory procedure--Differential Cell Count
(82)	2.10	Perform the following procedure--Cast removal
(83)	1.92	Perform the following laboratory procedure--Prothrombin Time
(84)	1.84	Conduct library search for physician
(85)	1.83	Perform the following procedure--O_2 administration
(86)	1.82	Assist with the following procedure--Casting
(87)	1.67	Perform the following procedure--Enemas
(88)	1.63	Assist with the following procedure--Lumbar Puncture
(89)	1.58	Assist with the following procedure--Paracentesis
(90)	1.57	Perform the following procedure--Nose and throat spray
(91)	1.54	Assist with the following procedure--Thoracentesis
(92)	1.28	Assist with the following procedure--Bone marrow aspiration and/or biopsy

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE VI

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF PROFICIENCY FOR EACH OF THE NINETY-TWO COMPETENCIES AS DETERMINED BY CLINICS

(1)*	3.96**	Receive patient with personal approach
(2.5)	3.89	Direct or assist patient with gowning and draping
(2.5)	3.89	Greet patients--personalizing approach
(4)	3.84	Explain delays
(5)	3.80	Take and record vital signs and height and weight
(6)	3.78	Prepare basic equipment and supplies for routine physical examination
(7)	3.76	Maintain adequate supplies in examination and treatment room
(8)	3.71	Answer telephone--place necessary calls
(9)	3.67	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(10)	3.64	Dispose of contaminated and disposable items
(11)	3.59	Handle and store sterilized material
(12)	3.56	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(13)	3.54	Collect and/or instruct patient with regard to correct method of specimen collection
(14.5)	3.53	Clean, wrap and sterilize equipment, instruments and supplies
(14.5)	3.53	Make appointments--cancel and reschedule appointments
(16)	3.50	File medical records, EKG-ECG tracings, X-ray reports
(17)	3.49	Take proper care of collected specimen
(18)	3.44	Send specimen to laboratory
(19)	3.43	Instruct patient regarding proper preparation for tests ordered by the physician
(20)	3.40	Review physician's instructions with the patient
(21)	3.35	Check eyes using Snellen Chart
(22)	3.31	Prepare charge slips for patient
(23)	3.25	Maintain a safe and controlled office environment
(24)	3.18	Maintain proper housekeeping
(25)	3.17	Observe the physical characteristics of the patient
(26)	3.15	Perform the following procedure--Proper bandaging
(27.5)	3.13	Prepare, instruct and assist patient for EKG-ECG
(27.5)	3.13	Test for color blindness
(29)	3.05	Make arrangements for hospital admittance--schedule surgeries
(30)	3.02	Assist with minor surgery using sterile techniques
(31)	3.00	Maintain patient's medical records
(32)	2.88	Possess basic typing ability
(33)	2.82	Maintain inventory of medical supplies, medications and office supplies
(34)	2.80	Review day's schedule with the physician
(35)	2.79	Transcribe medical information to insurance forms
(36)	2.76	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(37)	2.75	Receive and screen visitors and salesmen
(38)	2.71	Complete insurance forms for billing
(39.5)	2.68	Assist with the following procedure--Proctoscopy
(39.5)	2.68	Assist with the following procedure--Pelvic exam with smear or biopsy
(41.5)	2.64	Open and sort mail
(41.5)	2.64	Operate and maintain EKG-ECG machine
(43)	2.63	Maintain operating condition of medical and clerical equipment
(44)	2.62	Collect payments at time of visit
(45)	2.60	Perform the following procedure--Apply topical medications
(46)	2.59	Give medications as directed by the physician
(47.5)	2.56	Telephone prescriptions to pharmacy
(47.5)	2.56	Perform the following procedure--Enemas
(49)	2.55	Compose and type business letters

(51)	2.54	Perform the following procedure--Cast removal
(51)	2.54	Take EKG-ECG readings
(51)	2.54	Operate business machines
(53)	2.51	Receive and organize sample supplies
(54)	2.47	Perform tests for physical and chemical properties of urine
(55)	2.40	Conduct orientation of new personnel
(56)	2.37	Prepare and give injections under the direct supervision of the physician--Immunization
(57)	2.30	Prepare and replenish supplies in physician's bag
(58)	2.28	Meet with doctor to discuss office problems/concerns
(59)	2.21	Mail bills to patients
(60)	2.17	Maintain a quality control of reagents
(61)	2.13	Post payments received
(62)	2.09	Examine specimen microscopically
(63)	2.06	Position and prepare patient for X-ray
(64)	2.05	Assist with the following procedure--Casting
(65)	2.03	Collect venous and capillary blood
(66)	1.97	Prepare and give injections under the direct supervision of the physician--Allergy
(67)	1.93	Maintain an office procedure manual
(68.5)	1.92	Perform the following procedure--O_2 administration
(68.5)	1.92	Make financial arrangements with patient and physician
(70.5)	1.86	Maintain accounts receivable and accounts payable
(70.5)	1.86	Perform the following procedure--Nose and throat spray
(72)	1.85	Prepare blood smears
(73)	1.83	Prepare and give injections under the direct supervision of the physician--Vitamin
(74)	1.81	Assist with the following procedure--Paracentesis
(75)	1.78	Assist with the following procedure--Thoracentesis
(76.5)	1.76	Make bank deposits--balance account
(76.5)	1.76	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(78)	1.75	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(79.5)	1.69	Assist with the following procedure--Lumbar Puncture
(79.5)	1.69	Prepare and maintain employee's payroll record
(81)	1.65	Prepare checks for physician's signature
(82.5)	1.61	Prepare statistical reports
(82.5)	1.61	Develop X-ray
(85)	1.58	Take X-ray
(85)	1.58	Conduct library search for physician
(85)	1.58	Maintain petty cash fund
(87)	1.50	Perform the following laboratory procedure--Gram Stain
(88)	1.47	Perform the following laboratory procedure--Sedimentation Rate
(89)	1.39	Perform the following laboratory procedure--Blood Sugar
(90)	1.38	Perform the following laboratory procedure--Differential Cell Count
(91)	1.31	Make travel and housing arrangements
(92)	1.16	Perform the following laboratory procedure--Prothrombin Time

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE VII

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF PROFICIENCY FOR EACH OF THE NINETY-TWO COMPETENCIES AS DETERMINED BY GRADUATES

(1)*	4.40**	Great patients--personalizing approach
(2)	4.16	Explain delays
(3)	4.14	Receive patient with personal approach
(4.5)	4.08	Answer telephone--place necessary calls
(4.5)	4.08	Take and record vital signs and height and weight
(6)	4.03	Direct and assist patient with gowning and draping
(7)	3.99	Prepare basic equipment and supplies for routine physical examination
(8)	3.93	Maintain adequate supplies in examination and treatment room
(9)	3.92	Take proper care of collected specimen
(10)	3.89	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(11)	3.88	Send specimen to laboratory
(12.5)	3.85	Collect and/or instruct patient with regard to correct method of specimen collection
(12.5)	3.85	Dispose of contaminated and disposable items
(14)	3.82	Handle and store sterilized material
(15.5)	3.81	Maintain a safe and controlled office environment
(15.5)	3.81	Maintain patient's medical records
(17)	3.76	Make appointments--cancel and reschedule appointments
(18)	3.73	Review physician's instructions with the patients
(19.5)	3.67	Instruct patient regarding proper preparation for tests ordered by the physician
(19.5)	3.67	Assist with minor surgery using sterile technique
(21)	3.65	Clean, wrap and sterilize equipment, instruments and supplies
(22)	3.64	Maintain proper housekeeping
(23)	3.58	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(24)	3.55	File medical records, EKG/ECG tracings, X-ray reports
(25)	3.53	Check eyes using the Snellen chart
(26)	3.47	Observe the physical characteristics of patient
(27)	3.46	Prepare charge slips for patients
(28)	3.40	Possess basic typing ability
(29.5)	3.35	Maintain inventory of medical supplies, medications, and office supplies
(29.5)	3.35	Review day's schedule with the physician
(31)	3.30	Operate business machines
(32)	3.20	Perform the following procedure--Proper bandaging
(33.5)	3.19	Receive and organize sample supplies
(33.5)	3.19	Make arrangements for hospital admittance--schedule surgeries
(35)	3.17	Receive and screen visitors and salesmen
(36)	3.16	Test for color blindness
(37)	3.14	Telephone prescriptions to pharmacy
(38)	3.09	Maintain operating condition of medical and clerical equipment
(40)	3.03	Perform the following procedure--Apply topical medications
(40)	3.03	Open and sort mail
(40)	3.03	Prepare, instruct and assist patient for EKG-ECG
(42.5)	3.00	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar puncture
(42.5)	3.00	Maintain a quality control of reagents
(44.5)	2.96	Assist with the following procedure--Pelvic exam with smear or biopsy
(44.5)	2.96	Conduct orientation of new personnel
(46)	2.94	Perform tests for physical and chemical properties of urine
(47)	2.82	Give medications as directed by the physician
(48)	2.76	Meet with doctor to discuss office problems/concerns
(49)	2.68	Perform the following procedure--Enemas
(50)	2.64	Maintain an office procedure manual

(51)	2.61	Take EKG-ECG readings
(52)	2.60	Prepare and give injections under the direct supervision of the physician--Immunization
(53)	2.58	Transcribe medical information to insurance forms
(54)	2.57	Collect venous and capillary blood
(55)	2.54	Operate and maintain EKG-ECG machine
(56)	2.53	Compose and type business letters
(57)	2.48	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(58)	2.41	Examine specimen microscopically
(59)	2.38	Complete insurance forms for billing
(60)	2.35	Prepare blood smears
(61)	2.28	Assist with the following procedure--Proctoscopy
(62)	2.26	Prepare and give injections under the direct supervision of the physician--Vitamin
(63)	2.21	Prepare and give injections under the direct supervision of the physician--Allergy
(64.5)	2.19	Perform the following laboratory procedure--Blood Sugar
(64.5)	2.19	Mail bills to patients
(66)	2.18	Collect payments at time of visit
(67)	2.16	Perform the following lab procedures--Sedimentation Rate
(68)	2.15	Prepare and replenish supplies in physician's bag
(69)	2.14	Perform the following lab procedure--Differential Cell Count
(70)	2.11	Perform the following procedure--Nose and throat spray
(71)	2.09	Post payments received
(72.5)	2.06	Make financial arrangements with patient and physician
(72.5)	2.06	Maintain petty cash fund
(74)	2.05	Perform the following procedure--O_2 administration
(75.5)	2.01	Maintain accounts receivable and accounts payable
(75.5)	2.01	Make bank deposits--balance account
(77)	2.00	Perform the following lab procedure--Gram stain
(79)	1.92	Position and prepare patient for X-ray
(79)	1.92	Perform the following lab procedure--Prothrombin time
(79)	1.92	Prepare statistical reports
(81)	1.88	Prepare checks for physician's signature
(82)	1.87	Perform the following procedure--Cast removal
(83)	1.84	Assist with the following procedure--Casting
(84)	1.70	Conduct library search for physician
(85)	1.68	Make travel and housing arrangements
(86)	1.65	Develop X-ray
(87)	1.62	Prepare and maintain employee's payroll record
(88)	1.58	Take X-ray
(89)	1.55	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(90)	1.52	Assist with the following procedure--Lumbar puncture
(91)	1.50	Assist with the following procedure--Paracentesis
(92)	1.48	Assist with the following procedure--Thoracentesis

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE VIII

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE FOR EACH OF THE COMPETENCIES LISTED IN THE THREE CATOGORIES AS DETERMINED BY PHYSICIANS

Clerical, Secretarial, Managerial

(1)*	4.68**	Answer telephone--place necessary calls
(2)	4.41	Make appointments--cancel and reschedule appointments
(3)	4.29	Greet patients--personalizing approach
(5)	4.06	Transcribe medical information to insurance forms
(6)	4.03	Complete insurance forms for billing
(8)	3.97	Make bank deposits--balance account
(8)	3.97	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(11)	3.88	Maintain accounts receivable and accounts payable
(14)	3.82	Prepare charge slips for patients
(16)	3.79	Possess basic typing ability
(18.5)	3.76	Post payments received
(23)	3.68	Explain delays
(25)	3.67	Prepare checks for physician's signature
(26)	3.65	Maintain patient's medical records
(27)	3.61	Make financial arrangements with patient and physician
(30)	3.58	Prepare and maintain employee's payroll record
(31)	3.56	Meet with doctor to discuss office problems/concerns
(34)	3.53	File medical records, EKG-ECG tracings, X-ray reports
(34)	3.53	Mail bills to patients
(38)	3.47	Maintain inventory of medical supplies, medications and office supplies
(42.5)	3.41	Maintain operating condition of medical and clerical equipment
(42.5)	3.41	Collect payments at time of visit
(42.5)	3.38	Maintain proper housekeeping
(45.5)	3.38	Compose and type business letters
(47.5)	3.35	Operate business machines
(47.5)	3.35	Make arrangements for hospital admittance--schedule surgeries
(51.5)	3.26	Maintain petty cash fund
(60.5)	3.15	Receive and screen visitors and salesmen
(67)	3.06	Conduct orientation of new personnel
(70.5)	3.00	Open and sort mail
(72)	2.97	Review day's schedule with the physician
(76)	2.76	Maintain an office procedure manual
(83)	2.38	Prepare statistical reports
(84)	2.36	Make travel and housing arrangements
(85)	2.24	Prepare and replenish supplies in physician's bag
(87)	2.21	Receive and organize sample supplies
(91)	1.84	Conduct library search for physician

Diagnostic Tests and Procedures

(8)	3.97	Handle and store sterilized material
(10)	3.96	Instruct patient regarding proper preparation for tests ordered by the physician
(12)	3.83	Clean, wrap and sterilize equipment, instruments and supplies
(14)	3.82	Collect and/or instruct patient with regard to correct method of specimen collection
(18.5)	3.76	Take proper care of collected specimen
(20)	3.75	Position and prepare patient for X-ray
(23)	3.68	Perform tests for physicial and chemical properties of urine
(34)	3.53	Send specimen to laboratory
(39)	3.46	Take X-ray
(44)	3.40	Develop X-ray
(49)	3.32	Take EKG-ECG readings

(51.5)	3.26	Collect venous and capillary blood
(53)	3.25	Prepare, instruct and assist patient for EKG-ECG
(55)	3.22	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(56)	3.21	Operate and maintain EKG-ECG machine
(60.5)	3.15	Perform the following laboratory procedure--Sedimentation Rate
(60.5)	3.15	Prepare blood smears
(60.5)	3.15	Examine specimen microscopically
(64)	3.12	Perform the following laboratory procedure--Blood Sugar
(73)	2.96	Perform the following laboratory procedure--Gram Stain
(74)	2.85	Perform the following laboratory procedure--Differential Cell Count
(80)	2.48	Perform the following laboratory procedure--Prothrombin Time

Examination and Treatment Room Procedures

(4)	4.12	Receive patient with personal approach
(14)	3.82	Maintain adequate supplies in examination and treatment room
(17)	3.78	Maintain a safe and controlled office environment
(21)	3.72	Prepare basic equipment and supplies for routine physical examination
(23)	3.68	Prepare and give injections under the direct supervision of the physician--Immunization
(28.5)	3.59	Prepare and give injections under the direct supervision of the physician--Allergy
(28.5)	3.59	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(32)	3.55	Assist with minor surgery using sterile techniques
(36.5)	3.50	Take and record vital signs and height and weight
(36.5)	3.50	Direct or assist patient with gowning and draping
(40)	3.45	Assist with the following procedure--Pelvic exam with smear or biopsy
(41)	3.43	Give medications as directed by physician
(50)	3.28	Dispose of contaminated and disposable items
(54)	3.24	Review physician's instructions with the patient
(57.5)	3.17	Perform the following procedure--Proper bandaging
(57.5)	3.17	Telephone prescriptions to pharmacy
(63)	3.13	Maintain a quality control of reagents
(65.5)	3.07	Check eyes using the Snellen Chart
(65.5)	3.07	Observe the physical characteristics of patients
(68.5)	3.03	Test for color blindness
(68.5)	3.03	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(70.5)	3.00	Perform the following procedure--Apply topical medications
(75)	2.81	Prepare and give injections under the direct supervision of the physician--Vitamin
(77)	2.64	Assist with the following procedure--Casting
(78)	2.61	Assist with the following procedure--Proctoscopy
(79)	2.56	Assist with the following procedure--Lumbar puncture
(81.5)	2.42	Assist with the following procedure--Paracentesis
(81.5)	2.42	Assist with the following procedure--Thoracentesis
(86)	2.23	Perform the following procedure--Cast removal
(88)	2.12	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(89)	2.10	Perform the following procedure--O_2 administration
(90)	1.89	Perform the following procedure--Nose and throat spray
(92)	1.76	Perform the following procedure--Enemas

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE IX

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE FOR EACH OF THE COMPETENCIES LISTED IN THE THREE CATOGORIES AS DETERMINED BY CLINICS

Clerical, Secretarial, Managerial

(1)*	4.67**	Greet patients--personalizing approach
(3)	4.27	Answer telephone--place necessary calls
(14)	3.93	Make appointments--cancel and reschedule appointments
(15)	3.87	Explain delays
(18)	3.71	Prepare charge slips for patients
(20)	3.67	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(24)	3.51	Maintain patient's medical records
(29)	3.36	Maintain proper housekeeping
(32)	3.32	File medical records, EKG-ECG tracings, X-ray reports
(32)	3.32	Make arrangements for hospital admittance--schedule surgeries
(36)	3.20	Maintain inventory of medical supplies, medications, and office supplies
(37)	3.14	Transcribe medical information to insurance forms
(40)	3.09	Telephone prescriptions to pharmacy
(43)	2.89	Complete insurance forms for billing
(47)	2.81	Maintain operating condition of medical and clerical equipment
(50)	2.75	Compose and type business letters
(51)	2.74	Collect payments at time of visit
(54.5)	2.70	Meet with doctor to discuss office problems/concerns
(58)	2.60	Conduct orientation of new personnel
(60.5)	2.56	Review day's schedule with the physician
(62.5)	2.50	Receive and screen visitors and salesmen
(64)	2.49	Prepare and replenish supplies in physician's bag
(66.5)	2.42	Post payments received
(68)	2.41	Operate business machines
(70.5)	2.35	Maintain accounts receivable and accounts payable
(72)	2.32	Make bank deposits--balance account
(74)	2.20	Open and sort mail
(76)	2.17	Prepare and maintain employee's payroll record
(77)	2.16	Mail bills to patients
(78)	2.05	Maintain an office procedure manual
(79)	2.04	Receive and organize sample supplies
(80)	2.03	Prepare checks for physician's signature
(84)	1.95	Make financial arrangements with patient and physician
(87)	1.92	Maintain petty cash fund
(90)	1.66	Prepare statistical reports
(91)	1.64	Make travel and housing arrangements
(92)	1.50	Conduct library search for physician

Diagnostic Tests and Procedures

(5)	4.07	Take proper care of collected specimen
(8)	4.00	Collect and/or instruct patient with regard to correct method of specimen collection
(10)	3.98	Clean, wrap and sterilize equipment, instruments and supplies
(10)	3.98	Handle and store sterilize material
(12.5)	3.95	Instruct patient regarding proper preparation for tests
(16)	3.85	Send specimen to laboratory
(27)	3.42	Prepare, instruct and assist patient for EKG-ECG
(42)	2.97	Operate and maintain EKG-ECG machine
(48.5)	2.77	Take TKG-ECG readings
(52)	2.72	Perform tests for physical and chemical properties of urine

(65)	2.47	Examine specimen microscopically
(66.5)	2.42	Collect venous and capillary blood
(69)	2.36	Position and prepare patient for X-ray
(73)	2.27	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(75)	2.18	Prepare blood smears
(81)	2.00	Develop X-ray
(82.5)	1.97	Perform the following laboratory procedure--Sedimentation Rate
(82.5)	1.97	Perform the following laboratory procedure--Blood Sugar
(85.5)	1.94	Perform the following laboratory procedure--Gram Stain
(85.5)	1.94	Take X-ray
(88)	1.91	Perform the following laboratory procedure--Differential Cell Count
(89)	1.72	Perform the following laboratory procedure--Prothrombin Time

Examination and Treatment Room Procedure

(2)	4.47	Receive patients with personal approach
(4)	4.16	Take and record vital signs and height and weight
(6)	4.05	Direct or assist patient with gowning and draping
(7)	4.04	Prepare basic equipment and supplies for routine physical examination
(10)	3.98	Maintain adequate supplies in examination and treatment room
(12.5)	3.95	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(17)	3.84	Dispose of contaminated and disposable items
(19)	3.70	Assist with the following procedure--Pelvic exam with smear or biopsy
(21)	3.63	Assist with minor surgery using sterile techniques
(22)	3.60	Review physician's instructions with the patient
(23)	3.59	Maintain a safe and controlled office environment
(25)	3.50	Check eyes using the Snellen Chart
(26)	3.44	Observe the physical characteristics of patient
(28)	3.41	Perform the following procedure--Proper bandaging
(30)	3.34	Assist with the following procedure--Proctoscopy
(32)	3.32	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar puncture
(34)	3.29	Test for color blindness
(35)	3.26	Assist with the following procedure--Casting
(38)	3.13	Give medications as directed by the physician
(39)	3.11	Prepare and give injections under the direct supervision of the physician--Immunization
(41)	3.05	Telephone prescriptions to pharmacy
(44)	2.88	Perform the following procedure--Apply topical medications
(45)	2.85	Prepare and give injections under the direct supervision of the physician--Allergy
(46)	2.82	Perform the following procedure--Enemas
(48.5)	2.77	Perform the following procedure--Cast removal
(53)	2.71	Prepare and give injections under the direct supervision of the physician--Vitamin
(54.5)	2.70	Assist with the following procedure--Paracentesis
(56)	2.66	Maintain a quality control of reagents
(57)	2.61	Perform the following procedure--O_2 administration .
(59)	2.58	Assist with the following procedure--Thoracentesis
(60.5)	2.56	Assist with the following procedure--Bone marrow aspiration and/or biopsy
(62.5)	2.50	Assist with the following procedure--Lumbar puncture
(70.5)	2.35	Perform the following procedure--Nose and throat spray

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE X

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE FOR EACH OF THE COMPETENCIES LISTED IN THE THREE CATOGORIES AS DETERMINED BY GRADUATES

Clerical, Secretarial, Managerial

(1)*	4.55**	Greet patients--personalizing approach
(3)	4.31	Answer telephone--place necessary calls
(19)	3.87	Maintain patient's medical records
(20)	3.86	Explain delays
(21)	3.77	Maintain inventory of medical supplies, medications and office supplies
(22.5)	3.72	Maintain proper housekeeping
(27)	3.52	Make appointments--cancel and reschedule appointments
(28)	3.46	Prepare charge slips for patients
(30)	3.41	File medical records, EKG-ECG tracings, X-ray reports
(31.5)	3.39	Possess basic typing ability
(33)	3.31	Make arrangements for hospital admittance--schedule surgeries
(34)	3.29	Maintain operating condition of medical and clerical equipment
(40)	3.16	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(41)	3.13	Receive and screen visitors and salesmen
(44.5)	2.92	Meet with doctor to discuss office problems/concerns
(45.5)	2.91	Operate business machines
(53)	2.82	Review day's schedule with the physician
(55)	2.75	Conduct orientation of new personnel
(56)	2.73	Complete insurance forms for billing
(59.5)	2.63	Transcribe medical information to insurance form
(59.5)	2.63	Maintain an office procedure manual
(62)	2.57	Compose and type business letters
(63)	2.53	Receive and organize sample supplies
(64)	2.51	Open and sort mail
(65)	2.46	Post payments received
(70)	2.38	Mail bills to patients
(71)	2.37	Make bank deposits--balance account
(74.5)	2.31	Maintain accounts receivable and accounts payable
(76)	2.23	Make financial arrangements with patient and physician
(77.5)	2.19	Prepare and replenish supplies in physician's bag
(81.5)	2.11	Maintain petty cash fund
(83.5)	2.10	Collect payments at time of visit
(85.5)	2.09	Prepare checks for physician's signature
(87)	2.08	Prepare statistical reports
(90)	1.94	Prepare and maintain employee's payroll record
(91.5)	1.74	Make travel and housing arrangements
(91.5)	1.47	Conduct library search for physician

Diagnostic Tests and Procedures

(7)	4.12	Collect and/or instruct patient with regard to correct method of specimen collection
(8)	4.11	Instruct patient regarding proper preparation for tests ordered by the physician
(10)	4.06	Take proper care of collected specimen
(13)	4.01	Handle and store sterilized materials
(14.5)	3.97	Send specimen to laboratory
(17)	3.94	Clean, wrap, and sterilize equipment, instruments and supplies
(36)	3.23	Perform tests for physicial and chemical properties of urine
(38.5)	3.19	Prepare, instruct and assist patient for EKG-ECG
(44.5)	2.92	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(45.5)	2.91	Collect venous and capillary blood

(50.5)	2.87	Operate and maintain EKG-ECG machine
(50.5)	2.87	Take EKG-ECG readings
(57)	2.69	Examine specimen microscopically
(58)	2.67	Perform the following laboratory procedure--Blood Sugar
(61)	2.61	Prepare blood smears
(66)	2.45	Prepare the following laboratory procedure--Differential Cell Count
(67)	2.44	Prepare the following laboratory procedure--Sedimentation Rate
(72)	2.35	Perform the following laboratory procedure--Gram Stain
(73)	2.34	Position and prepare patient for X-ray
(74.5)	2.31	Perform the following laboratory procedure--Prothrombin Time
(80)	2.17	Take X-ray
(85.5)	2.09	Develop X-ray

Examination and Treatment Room Procedures

(2)	4.47	Receive patient with personal approach
(4.5)	4.22	Maintain adequate supplies in examination and treatment room
(4.5)	4.22	Prepare basic equipment and supplies for routine physical examination
(6)	4.15	Take and record vital signs and height and weight
(9)	4.09	Maintain safe and controlled office environment
(11)	4.05	Direct or assist patient with gowning or draping
(12)	4.03	Review physician's instructions with the patient
(14.5)	3.97	Dispose of contaminated and disposable items
(16)	3.96	Assist with minor surgery using sterile techniques
(18)	3.92	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(22.5)	3.72	Assist with the following procedure--Pelvic exam with smear or biopsy
(24)	3.61	Telephone prescriptions to pharmacy
(25)	3.57	Observe the physical characteristics of patient
(26)	3.55	Prepare equipment for special procedures, e.g. Procto-Bone Marrow-Lumbar puncture
(29)	3.44	Give medications as directed by physician
(31.5)	3.39	Check eyes with Snellen Chart
(35)	3.28	Perform the following procedure--Proper bandaging
(37)	3.21	Maintain a quality control of reagents
(38.5)	3.19	Prepare and give injections under the direct supervision of the physician--Immunization
(42)	3.10	Perform the following procedure--Apply topical medications
(43)	2.96	Assist with the following procedure--Proctoscopy
(48)	2.89	Prepare and give injections under direct supervision of the physician--Vitamin
(49)	2.88	Prepare and give injections under the direct supervision of the physician--Allergy
(52)	2.84	Test for color blindness
(54)	2.81	Perform the following procedure--Enemas
(68)	2.41	Perform the following procedure--O_2 administration
(69)	2.40	Assist with the following procedure--Casting
(77.5)	2.19	Perform the following procedure--Cast removal
(79)	2.18	Perform the following procedure--Nose and throat spray
(81.5)	2.11	Assist with the following procedure--Bone Marrow Aspiration and/or biopsy
(83.5)	2.10	Assist with the following procedure--Lumbar Puncture
(87)	2.08	Assist with the following procedure--Paracentesis
(87)	2.08	Assist with the following procedure--Thoracentesis

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE XI

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF PROFICIENCY FOR EACH OF THE COMPETENCIES LISTED IN THE THREE CATOGORIES AS DETERMINED BY PHYSICIANS

Clerical, Secretarial, Managerial

(1)*	3.79**	Greet patients--personalizing approach
(2)	3.65	Make appointments--cancel and reschedule appointments
(4)	3.62	Answer telephone--place necessary calls
(7)	3.53	Possess basic typing ability
(12.5)	3.47	Maintain proper housekeeping
(15)	3.44	Explain delays
(16)	3.41	Collect payments at time of visit
(19.5)	3.38	Meet with doctor to discuss office problems/concerns
(19.5)	3.38	File medical records, EKG-ECG tracings, X-ray reports
(23)	3.35	Receive and screen visitors and salesmen
(24.5)	3.32	Operate business machines
(24.5)	3.32	Mail bills to patients
(29)	3.29	Maintain patient's medical records
(29)	3.29	Maintain operating condition of medical and clerical equipment
(29)	3.29	Make bank deposits--balance account
(32)	3.26	Interview and complete forms--start file for new patients obtain necessary signatures for insurance
(32)	3.26	Maintain accounts receivable and accounts payable
(32)	3.26	Maintain petty cash fund
(34)	3.24	Post payments received
(36)	3.21	Transcribe medical information to insurance forms
(38.5)	3.18	Prepare and maintain employee's payroll record
(41.5)	3.15	Make financial arrangements with patient and physician
(41.5)	3.15	Prepare checks for physician's signature
(41.5)	3.15	Prepare charge slips for patients
(41.5)	3.15	Complete insurance form for billing
(46.5)	3.12	Compose and type business letters
(46.5)	3.12	Maintain inventory of medical supplies, medications and office supplies
(48)	3.06	Conduct orientation of new personnel
(49.5)	2.97	Open and sort mail
(51)	2.94	Make arrangements for hospital admittance--schedule surgeries
(55)	2.88	Review day's schedule with the physician
(56)	2.85	Maintain an office procedure manual
(62.5)	2.71	Receive and organize sample supplies
(66.5)	2.61	Make travel and housing arrangements
(77)	2.27	Prepare and replenish supplies in physician's bag
(80)	2.22	Prepare statistical reports
(84)	1.84	Conduct library search for physician

Disgnostic Tests and Procedures

(6)	3.54	Collect and/or instruct patient with regard to correct method of specimen collection
(9.5)	3.48	Handle and store sterilized material
(9.5)	3.48	Take proper care of collected specimen
(12.5)	3.47	Clean, wrap and sterilize equipment. instruments and supplies
(19.5)	3.38	Instruct patient regarding proper preparation for tests ordered by the physician
(27)	3.30	Send specimen to laboratory
(38.5)	3.18	Perform tests for physical and chemical properties of urine
(44.5)	3.14	Position and prepare patient for X-ray
(52.5)	2.93	Develop X-ray
(58)	2.81	Examine specimen microscopically

(59)	2.79	Take X-ray
(62.5)	2.71	Operate and maintain EKG-ECG machine
(64)	2.64	Take EKG-ECG readings
(66.5)	2.61	Prepare, instruct and assist patient for EKG-ECG
(69.5)	2.59	Collect venous and capillary blood
(71.5)	2.52	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(73)	2.50	Prepare blood smears
(75)	2.46	Perform the following laboratory procedure--Sedimentation Rate
(76)	2.31	Perform the following laboratory procedure--Blood Sugar
(79)	2.24	Perform the following laboratory procedure--Gram Stain
(81)	2.12	Perform the following laboratory procedure--Differential Cell Count
(83)	1.92	Perform the following laboratory procedure--Prothrombin Time

Examination and Treatment Room Procedures

(3)	3.64	Maintain adequate supplies in examination and treatment room
(5)	3.55	Receive patient with personal approach
(8)	3.50	Prepare basic equipment and supplies for routine physical examination
(12.5)	3.47	Position patient for diagnostic and/or treatment procedure and explain why they are necessary
(12.5)	3.47	Direct or assist patient with gowning and draping
(19.5)	3.38	Take and record vital signs and height and weight
(19.5)	3.38	Observe the physical characteristics of patient
(19.5)	3.38	Test for color blindness
(26)	3.31	Maintain a safe and controlled office environment
(35)	3.23	Check eyes using the Snellen Chart
(37)	3.19	Dispose of contaminated and disposable items
(44.5)	3.14	Review physician's instructions with the patient
(49.5)	2.97	Perform the following procedure--Proper bandaging
(52.5)	2.93	Prepare and give injections under the direct supervision of the physician--Immunization
(54)	2.90	Prepare and give injections under the direct supervision of the physician--Allergy
(57)	2.84	Assist with minor surgery using sterile techniques
(60.5)	2.75	Perform the following procedure--Apply topical medications
(60.5)	2.75	Give medications as directed by the physician
(65)	2.63	Telephone prescriptions to pharmacy
(68)	2.60	Maintain a quality control of reagents
(69.5)	2.59	Assist with the following procedure--Pelvic exam with smear or biopsy
(71.5)	2.52	Prepare and give injections under the direct supervision of the physician--Vitamin
(74)	2.48	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(78)	2.25	Assist with the following procedure--Proctoscopy
(82)	2.10	Perform the following procedure--Cast Removal
(85)	1.83	Perform the following procedure--O_2 administration
(86)	1.82	Assist with the following procedure--Casting
(87)	1.67	Perform the following procedure--Enemas
(88)	1.63	Assist with the following procedure--Lumbar Puncture
(89)	1.58	Assist with the following procedure--Paracentesis
(90)	1.57	Perform the following procedure--Nost and throat spray
(91)	1.54	Assist with the following procedure--Thoracentasis
(92)	1.28	Assist with the following procedure--Bone Marrow Aspiration and/or biopsy

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE XII

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF PROFICIENCY FOR EACH OF THE COMPETENCIES LISTED IN THE THREE CATOGORIES AS DETERMINED BY CLINICS

Clerical, Secretarial, Manaerial

(2.5)*	3.89**	Greet patients--personalizing approach
(4)	3.84	Explain delays
(8)	3.71	Answer telephone--place necessary calls
(12)	3.56	Interview and complete forms--start file for new patients--obtain necessary signatures for insurance
(14.5)	3.53	Make appointments--cancel and reschedule appointments
(16)	3.50	File medical records, EKG-ECG tracings, X-ray reports
(22)	3.31	Prepare charge slips for patients
(24)	3.18	Maintain proper housekeeping
(29)	3.05	Make arrangements for hospital admittance--schedule surgeries
(31)	3.00	Maintain patient's medical records
(32)	2.88	Possess basic typing ability
(33)	2.82	Maintain inventory of medical supplies, medications and office supplies
(34)	2.80	Review day's schedule with the physician
(35)	2.79	Transcribe medical information to insurance forms
(37)	2.75	Receive and screen visitors and salesmen
(38)	2.71	Complete insurance forms for billing
(41.5)	2.64	Open and sort mail
(43)	2.63	Maintain operating condition of medical and clerical equipment
(44)	2.62	Collect payments at time of visit
(49)	2.55	Compose and type business letters
(51)	2.54	Operate business machines
(53)	2.51	Receive and organize sample supplies
(55)	2.40	Conduct orientation of new personnel
(57)	2.30	Prepare and replenish supplies in physician's bag
(58)	2.28	Meet with doctor to discuss office problems/concerns
(59)	2.21	Mail bills to patients
(61)	2.13	Post payments received
(67)	1.93	Maintain an office procedure manual
(68.5)	1.92	Make financial arrangements with patient and physician
(70.5)	1.86	Maintain accounts receivable and accounts payable
(76.5)	1.76	Make bank deposits--balance account
(79.5)	1.69	Prepare and maintain employee's payroll record
(81)	1.65	Prepare checks for physician's signature
(82.5)	1.61	Prepare statistical reports
(85)	1.58	Conduct library search for physician
(85)	1.58	Maintain petty cash fund
(91)	1.31	Make travel and housing arrangements

Disgnostic Tests and Procedures

(11)	3.59	Handle and store sterilized material
(13)	3.54	Collect and/or instruct patient with regard to correct method of specimen collection
(14.5)	3.53	Clean, wrap and sterilize equipment, instruments and supplies
(17)	3.49	Take proper care of collected specimen
(18)	3.44	Send sepcimen to laboratory
(19)	3.43	Instruct patient regarding proper preparation for tests ordered by the physician
(27.5)	3.13	Prepare, instruct and assist patient for EKG-ECG
(41.5)	2.64	Operate and maintain EKG-ECG machine
(51)	2.54	Take EKG-ECG readings

(54)	2.47	Perform tests for physical and chemical properties of urine
(62)	2.09	Examine specimen microscopically
(63)	2.06	Position and prepare patient for X-ray
(65)	2.03	Collect venous and capillary blood
(72)	1.85	Prepare blood smears
(76.5)	1.76	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(82.5)	1.61	Develop X-ray
(85)	1.58	Take X-ray
(87)	1.50	Perform the following laboratory procedure--Gram Stain
(88)	1.47	Perform the following laboratory procedure--Sedimentation Rate
(89)	1.39	Perform the following laboratory procedure--Blood Sugar
(90)	1.38	Perform the following laboratory procedure--Differential Cell Count
(92)	1.16	Perform the following laboratory procedure--Prothrombin Time

Examination and Treatment Room Procedure

(1)	3.96	Receive patient with personal approach
(2.5)	3.89	Direct or assist patient with gowning and draping
(5)	3.80	Take and record vital signs and height and weight
(6)	3.78	Prepare basic equipment and supplies for routine physical examination
(7)	3.76	Maintain adequate supplies in examination and treatment room
(9)	3.67	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(10)	3.64	Dispose of contaminated and disposable items
(20)	3.40	Review physician's instructions with the patient
(21)	3.35	Check eyes using Snellen Chart
(23)	3.25	Maintain a safe and controlled office environment
(25)	3.17	Observe the physical characteristics of the patient
(26)	3.15	Perform the following procedure--Proper bandaging
(27.5)	3.13	Test for color blindness
(30)	3.02	Assist with minor surgery using sterile techniques
(36)	2.76	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(39.5)	2.68	Assist with the following procedure--Proctoscopy
(39.5)	2.68	Assist with the following procedure--Pelvic exam with smear or biopsy
(45)	2.60	Perform the following procedure--Apply topical medications
(46)	2.59	Give medications as directed by the physician
(47.5)	2.56	Telephone prescriptions to pharmacy
(47.5)	2.56	Perform the following procedure--Enemas
(51)	2.54	Perform the following procedure--Cast Removal
(56)	2.37	Prepare and give injections under the direct supervision of the physician--Immunization
(60)	2.17	Maintain a quality control of reagents
(64)	2.05	Assist with the following procedure--Casting
(66)	1.97	Prepare and give injections under the direct supervision of the physician--Allergy
(68.5)	1.92	Perform the following procedure--O_2 administration
(70.5)	1.86	Perform the following procedure--Nose and throat spray
(73)	1.83	Prepare and give injections under the direct supervision of the physician--Vitamin
(74)	1.81	Assist with the following procedure--Paracentesis
(75)	1.78	Assist with the following procedure--Thoracentesis
(78)	1.75	Assist with the following procedure--Bone Marrow aspiration and/or biopsy
(79.5)	1.69	Assist with the following procedure--Lumbar Puncture

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE XIII

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF PROFICIENCY FOR EACH OF THE COMPETENCIES LISTED IN THE THREE CATOGORIES AS DETERMINED BY GRADUATES

Clerical, Secretarial, Managerial

(1)*	4.40**	Greet patients--personalizing approach
(2)	4.16	Explain delays
(4.5)	4.08	Answer telephone--place necessary calls
(15.5)	3.81	Maintain patient's medical records
(17)	3.76	Make appointments--cancel and reschedule appointments
(22)	3.64	Maintain proper housekeeping
(23)	3.58	Interview and complete forms--start files for new patients--obtain necessary signatures for insurance
(24)	3.55	File medical records, EKG-ECG tracings, X-ray reports
(27)	3.46	Prepare charge slips for patients
(28)	3.40	Possess basic typing ability
(29.5)	3.35	Maintain inventory of medical supplies, medications, and office supplies
(29.5)	3.35	Review day's schedule with the physician
(31)	3.30	Operate business machines
(33.5)	3.19	Receive and organize sample supplies
(33.5)	3.19	Make arrangements for hospital admittance--schedule surgeries
(35)	3.17	Receive and screen visitors and salesmen
(38)	3.09	Maintain operating condition of medical and clerical equipment
(40)	3.03	Open and sort mail
(44.5)	2.96	Conduct orientation of new personnel
(48)	2.76	Meet with doctor to discuss office problems/concerns
(50)	2.64	Maintain an office procedure manual
(53)	2.58	Transcribe medical information to insurance forms
(56)	2.53	Compose and type business letters
(59)	2.38	Complete insurance forms for billing
(64.5)	2.19	Mail bills to patients
(66)	2.18	Collect payments at time of visit
(68)	2.15	Prepare and replenish supplies in physician's bag
(71)	2.09	Post payments received
(72.5)	2.06	Make financial arrangements with patient and physician
(72.5)	2.06	Maintain petty cash fund
(75.5)	2.01	Maintain accounts receivable and accounts payable
(75.5)	2.01	Make bank deposits--balance account
(79)	1.92	Prepare statistical reports
(81)	1.88	Prepare checks for physician's signature
(84)	1.70	Conduct library search for physician
(85)	1.68	Make travel and housing arrangements
(87)	1.62	Prepare and maintain employee's payroll record

Diagnostic Tests and Procedure

(9)	3.92	Take proper care of collected specimen
(11)	3.88	Send specimen to laboratory
(12.5)	3.85	Collect and/or instruct patient with regard to correct method of specimen collection
(14)	3.82	Handle and store sterilized material
(19.5)	3.67	Instruct patient regarding proper preparation for tests ordered by the physician
(21)	3.65	Clean, wrap, and sterilize equipment, instruments and supplies
(40)	3.03	Prepare, instruct and assist patient for EKG-ECG
(46)	2.94	Perform tests for physical and chemical properties of urine
(51)	2.61	Take EKG-ECG readings

(54)	2.57	Collect venous and capillary blood
(55)	2.54	Operate and maintain EKG-ECG machine
(57)	2.48	Perform the following laboratory procedure--Hematocrit and Hemoglobin
(58)	2.41	Examine specimen microscopically
(60)	2.35	Prepare blood smears
(64.5)	2.19	Perform the following laboratory procedure--Blood Sugar
(67)	2.16	Perform the following laboratory procedure--Sedimentation Rate
(69)	2.14	Perform the following laboratory procedure--Differential Cell Count
(77)	2.00	Perform the following laboratory procedure--Gram Stain
(79)	1.92	Position and prepare patient for X-ray
(79)	1.92	Perform the following laboratory procedure--Prothrombin Time
(86)	1.65	Develop X-ray
(88)	1.58	Take X-ray

Examination and Treatment Room Procedures

(3)	4.14	Receive patient with personal approach
(4.5)	4.08	Take and record vital signs and height and weight
(6)	4.03	Direct and assist patient with gowning and draping
(7)	3.99	Prepare basic equipment and supplies for routine physical examination
(8)	3.93	Maintain adequate supplies in examination and treatment room
(10)	3.89	Position patient for diagnostic and/or treatment procedures and explain why they are necessary
(12.5)	3.85	Dispose of contaminated and disposable items
(15.5)	3.81	Maintain a safe and controlled office environment
(18)	3.73	Review physician's instructions with the patient
(19.5)	3.67	Assist with minor surgery using sterile techniques
(25)	3.53	Check eyes using the Snellen Chart
(26)	3.47	Observe the physical characteristics of patient
(32)	3.20	Perform the following procedure--Proper bandaging
(36)	3.16	Test for color blindness
(37)	3.14	Telephone prescriptions to pharmacy
(40)	3.03	Perform the following procedure--Apply topical medications
(42.5)	3.00	Prepare equipment for special procedures, e.g. Procto--Bone Marrow--Lumbar Puncture
(42.5)	3.00	Maintain a quality control of reagents
(44.5)	2.96	Assist with the following procedure--Pelvic exam with smear or biopsy
(47)	2.82	Give medications as directed by the physician
(49)	2.68	Perform the following procedures--Enemas
(52)	2.60	Prepare and give injections under the direct supervision of the physician--Immunization
(61)	2.28	Assist with the following procedure--Proctoscopy
(62)	2.26	Prepare and give injections under the direct supervision of the physician--Vitamin
(63)	2.21	Prepare and give injections under the direct supervision of the physician--Allergy
(70)	2.11	Perform the following procedure--Nose and throat spray
(74)	2.05	Perform the following procedure--O_2 administration
(82)	1.87	Perform the following procedure--Cast removal
(83)	1.84	Assist with the following procedure--Casting
(89)	1.55	Assist with the following procedure--Bone Marrow aspiration and/or biopsy
(90)	1.52	Assist with the following procedure--Lumbar Puncture
(91)	1.50	Assist with the following procedure--Paracentesis
(92)	1.48	Assist with the following procedure--Thoracentesis

* Rank Order

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** Mean Response on a 5-point Likert Scale

TABLE XIV

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE AND THE LEVEL OF PROFICIENCY OF THE NINETY-TWO COMPETENCIES ACCORDING TO THE RESPONSES OF THE THREE POPULATIONS

Competencies	Level of Importance			Level of Proficiency		
	PHYSICIANS n=34	CLINICS n=45	GRADUATES n=80	PHYSICIANS n=34	CLINICS n=45	GRADUATES n=80
Answer telephone - place necessary calls	(1)* 4.68**	(3) 4.27	(3) 4.31	(4) 3.62	(8) 3.71	(4.5) 4.08
Make appointments - cancel and reschedule appointments	(2) 4.41	(14) 3.93	(27) 3.52	(2) 3.65	(14.5) 3.53	(17) 3.76
Greet Patients - personalizing approach	(3) 4.29	(1) 4.67	(1) 4.55	(1) 3.79	(2.5) 3.89	(1) 4.40
Interview and complete forms - start file for new patients - obtain necessary signatures for insurance	(8) 3.97	(20) 3.67	(40) 3.16	(32) 3.26	(12) 3.56	(23) 3.58
Explain delays	(23) 3.68	(15) 3.87	(20) 3.86	(15) 3.44	(4) 3.84	(2) 4.16
Review day's schedule with the physician	(72) 2.97	(60.5) 2.56	(53) 2.82	(55) 2.88	(34) 2.80	(29.5) 3.35
Make arrangements for hospital admittance - schedule surgeries	(47.5) 3.35	(32) 3.32	(33) 3.31	(51) 2.94	(29) 3.05	(33.5) 3.19
Transcribe medical information to insurance forms	(5) 4.06	(37) 3.14	(59.5) 2.63	(36) 3.21	(35) 2.79	(53) 2.58
Open and sort mail	(70.5) 3.00	(74) 2.20	(64) 2.51	(49.5) 2.97	(41.5) 2.64	(40) 3.03
File medical records, EKG-ECG tracings, X-ray reports	(34) 3.53	(32) 3.32	(30) 3.41	(19.5) 3.38	(16) 3.50	(24) 3.55
Maintain patient's medical records	(26) 3.65	(24) 3.51	(19) 3.87	(29) 3.29	(31) 3.00	(15.5) 3.81
Receive and organize sample supplies	(87) 2.21	(79) 2.04	(63) 2.53	(62.5) 2.71	(53) 2.51	(33.5) 3.19
Prepare and replenish supplies in physician's bag	(85) 2.24	(64) 2.49	(77.5) 2.19	(77) 2.27	(57) 2.30	(68) 2.15
Operate business machines	(47.5) 3.35	(68) 2.41	(45.5) 2.91	(24.5) 3.32	(51) 2.54	(31) 3.30
Receive and screen visitors and salesmen	(60.5) 3.15	(62.5) 2.50	(41) 3.13	(23) 3.35	(37) 2.75	(35) 3.17
Maintain proper housekeeping	(45.5) 3.38	(29) 3.36	(22.5) 3.72	(12.5) 3.47	(24) 3.18	(22) 3.64
Maintain inventory of medical supplies, medications, and office supplies	(38) 3.47	(36) 3.20	(21) 3.77	(46.5) 3.12	(33) 2.82	(29.5) 3.35
Maintain operating condition of medical and clerical equipment	(42.5) 3.41	(47) 2.81	(34) 3.29	(29) 3.29	(43) 2.63	(38) 3.09
Maintain an office procedure manual	(76) 2.76	(78) 2.05	(59.5) 2.63	(56) 2.85	(67) 1.93	(50) 2.64
Conduct orientation of new personnel	(67) 3.06	(58) 2.60	(55) 2.75	(48) 3.06	(55) 2.40	(44.5) 2.96
Prepare statistical reports	(83) 2.38	(90) 1.66	(88) 2.08	(80) 2.22	(82.5) 1.61	(79) 1.92
Conduct library search for physician	(91) 1.84	(92) 1.50	(91.5) 1.74	(84) 1.84	(85) 1.58	(84) 1.70
Prepare charge slips for patients	(14) 3.82	(18) 3.71	(28) 3.46	(41.5) 3.14	(22) 3.31	(27) 3.46
Complete insurance forms for billing	(6) 4.03	(43) 2.89	(56) 2.73	(41.5) 3.15	(38) 2.71	(59) 2.38
Make financial arrangements with patient and physician	(27) 3.61	(84) 1.95	(76) 2.23	(41.5) 3.15	(68.5) 1.92	(72.5) 2.06
Collect payments at time of visit	(42.5) 3.41	(51) 2.74	(83.5) 2.10	(16) 3.41	(44) 2.62	(66) 2.18
Mail bills to patients	(34) 3.53	(77) 2.16	(70) 2.38	(24.5) 3.32	(59) 2.21	(64.5) 2.19
Post payments received	(18.5) 3.76	(66.5) 2.42	(65) 2.46	(34) 3.24	(61) 2.13	(71) 2.09
Make bank deposits - balance account	(8) 3.97	(72) 2.32	(71) 2.37	(29) 3.29	(76.5) 1.76	(75.5) 2.01
Maintain petty cash fund	(51.5) 3.26	(87) 1.92	(81.5) 2.11	(32) 3.26	(85) 1.58	(72.5) 2.06
Maintain accounts receivable and accounts payable	(11) 3.88	(70.5) 2.35	(74.5) 2.31	(32) 3.26	(70.5) 1.86	(75.5) 2.01
Prepare checks for physician's signature	(25) 3.67	(80) 2.03	(85.5) 2.09	(41.5) 3.15	(81) 1.65	(81) 1.88
Prepare and maintain employee's payroll record	(30) 3.58	(76) 2.17	(90) 1.94	(38.5) 3.18	(79.5) 1.69	(87) 1.62
Meet with doctor to discuss office problems/concerns	(31) 3.56	(54.5) 2.70	(44.5) 2.92	(19.5) 3.38	(58) 2.28	(48) 2.76
Compose and type business letters	(45.5) 3.38	(50) 2.75	(62) 2.57	(46.5) 3.12	(49) 2.55	(56) 2.53
Possess basic typing ability	(16) 3.79	(40) 3.09	(31.5) 3.39	(7) 3.53	(32) 2.88	(28) 3.40
Make travel and housing arrangements	(84) 2.36	(91) 1.64	(91.5) 1.74	(66.5) 2.61	(91) 1.31	(85) 1.68
DIAGNOSTIC TESTS AND PROCEDURES						

Instruct patient regarding proper preparation for tests ordered by the physician.	(10) 3.96	(12.5) 3.95	(8) 4.11	(19.5) 3.38	(19) 3.43	(19.5) 3.67
Collect and/or instruct patient with regard to correct method of specimen collection	(14) 3.82	(8) 4.00	(7) 4.12	(6) 3.54	(13) 3.54	(12.5) 3.85
Take proper care of collected specimen	(18.5) 3.76	(5) 4.07	(10) 4.06	(9.5) 3.48	(17) 3.49	(9) 3.92
Send specimen to laboratory	(34) 3.53	(16) 3.85	(14.5) 3.97	(27) 3.30	(18) 3.44	(11) 3.88
Perform tests for physical and chemical properties of urine	(23) 3.68	(52) 2.72	(36) 3.23	(38.5) 3.18	(54) 2.47	(46) 2.94
Examine specimen microscopically	(60.5) 3.15	(65) 2.47	(57) 2.69	(58) 2.81	(62) 2.09	(58) 2.41
Collect venous and capillary blood	(51.5) 3.26	(66.5) 2.42	(45.5) 2.91	(69.5) 2.59	(65) 2.03	(54) 2.57
Prepare blood smears	(60.5) 3.15	(75) 2.18	(61) 2.61	(73) 2.50	(72) 1.85	(60) 2.35
Perform the following laboratory procedures:						
Differential Cell Count	(74) 2.85	(88) 1.91	(66) 2.45	(81) 2.12	(90) 1.38	(69) 2.14
Sedimentation Rate	(60.5) 3.15	(82.5) 1.97	(67) 2.44	(75) 2.46	(88) 1.47	(67) 2.16
Hematocrit and Hemoglobin	(55) 3.22	(73) 2.27	(44.5) 2.92	(71.5) 2.52	(76.5) 1.76	(57) 2.48
Gram Stain	(73) 2.96	(85.5) 1.94	(72) 2.35	(79) 2.24	(87) 1.50	(77) 2.00
Blood Sugar	(64) 3.12	(82.5) 1.97	(58) 2.67	(76) 2.31	(89) 1.39	(64.5) 2.19
Prothrombin Time	(80) 2.48	(89) 1.72	(74.5) 2.31	(83) 1.92	(92) 1.16	(79) 1.92
Clean, wrap and sterilize equipment, instruments and supplies	(12) 3.83	(10) 3.98	(17) 3.94	(12.5) 3.47	(14.5) 3.53	(21) 3.65
Handle and store sterilized material	(8) 3.97	(10) 3.98	(13) 4.01	(9.5) 3.48	(11) 3.59	(14) 3.82
Prepare, instruct and assist patient for EKG-ECG	(53) 3.25	(27) 3.42	(38.5) 3.19	(66.5) 2.61	(27.5) 3.13	(40) 3.03
Take EKG-ECG readings	(49) 3.32	(48.5) 2.77	(50.5) 2.87	(64) 2.64	(51) 2.54	(51) 2.61
Operate and maintain EKG-ECG machine	(56) 3.21	(42) 2.97	(50.5) 2.87	(62.5) 2.71	(41.5) 2.64	(55) 2.54
Position and prepare patient for X-ray	(20) 3.75	(69) 2.36	(73) 2.34	(44.5) 3.14	(63) 2.06	(79) 1.92
Take X-ray	(39) 3.46	(85.5) 1.94	(80) 2.17	(59) 2.79	(85) 1.58	(88) 1.58
Develop X-ray	(44) 3.40	(81) 2.00	(85.5) 2.09	(52.5) 2.93	(82.5) 1.61	(86) 1.65

Maintain adequate supplies in examination and treatment room	(14) 3.82	(10) 3.98	(4.5) 4.22	(3) 3.64	(7) 3.76	(8) 3.93
Prepare basic equipment and supplies for routine physical examination	(21) 3.72	(7) 4.04	(4.5) 4.22	(8) 3.50	(6) 3.78	(7) 3.99
Receive patient with personal approach	(4) 4.12	(2) 4.47	(2) 4.47	(5) 3.55	(1) 3.96	(3) 4.14
Direct or assist patient with gowning and draping	(36.5) 3.50	(6) 4.05	(11) 4.05	(12.5) 3.47	(2.5) 3.89	(6) 4.03
Position patient for diagnostic and/or treatment procedures and explain why they are necessary	(28.5) 3.59	(12.5) 3.95	(18) 3.92	(12.5) 3.47	(9) 3.67	(10) 3.89
Take and record vital signs and height and weight	(36.5) 3.50	(4) 4.16	(6) 4.15	(19.5) 3.38	(5) 3.80	(4.5) 4.08
Assist with minor surgery using sterile techniques	(32) 3.55	(21) 3.63	(16) 3.96	(57) 2.84	(30) 3.02	(19.5) 3.67
Prepare equipment for special procedures, e.g., Procto - Bone Marrow - Lumbar puncture	(68.5) 3.03	(32) 3.32	(26) 3.55	(74) 2.48	(36) 2.76	(42.5) 3.00
Dispose of contaminated and disposable items	(50) 3.28	(17) 3.84	(14.5) 3.97	(37) 3.19	(10) 3.64	(12.5) 3.85
Perform the following procedures:						
Enemas	(92) 1.76	(46) 2.82	(54) 2.81	(87) 1.67	(47.5) 2.56	(49) 2.68
O_2 administration	(89) 2.10	(57) 2.61	(68) 2.41	(85) 1.83	(68.5) 1.92	(74) 2.05
Nose and throat spray	(90) 1.89	(70.5) 2.35	(79) 2.18	(90) 1.57	(70.5) 1.86	(70) 2.11
Cast removal	(86) 2.23	(48.5) 2.77	(77.5) 2.19	(82) 2.10	(51) 2.54	(82) 1.87
Proper bandaging	(57.5) 3.17	(28) 3.41	(35) 3.28	(49.5) 2.97	(26) 3.15	(32) 3.20
Apply topical medications	(70.5) 3.00	(44) 2.88	(42) 3.10	(60.5) 2.75	(45) 2.60	(40) 3.03
Assist with the following procedures:						
Proctoscopy	(78) 2.61	(30) 3.34	(43) 2.96	(78) 2.25	(39.5) 2.68	(61) 2.28
Pelvic exam with smear or biopsy	(40) 3.45	(19) 3.70	(22.5) 3.72	(69.5) 2.59	(39.5) 2.68	(44.5) 2.96
Lumbar puncture	(79) 2.56	(62.5) 2.50	(83.5) 2.10	(88) 1.63	(79.5) 1.69	(90) 1.52
Bone marrow aspiration and/or biopsy	(88) 2.12	(60.5) 2.56	(81.5) 2.11	(92) 1.28	(78) 1.75	(89) 1.55
Paracentesis	(81.5) 2.42	(54.5) 2.70	(88) 2.08	(89) 1.58	(74) 1.81	(91) 1.50
Thoracentesis	(81.5) 2.42	(59) 2.58	(88) 2.08	(91) 1.54	(75) 1.78	(92) 1.48
Casting	(77) 2.64	(35) 3.26	(69) 2.40	(86) 1.82	(64) 2.05	(83) 1.84
Prepare and give injections under the direct supervision of the physician						
Immunization	(23) 3.68	(39) 3.11	(38.5) 3.19	(52.5) 2.93	(56) 2.37	(52) 2.60
Allergy	(28.5) 3.59	(45) 2.85	(49) 2.88	(54) 2.90	(66) 1.97	(63) 2.21
Vitamin	(75) 2.81	(53) 2.71	(48) 2.89	(71.5) 2.52	(73) 1.83	(62) 2.26
Give medications as directed by the physician	(41) 3.43	(38) 3.13	(29) 3.44	(60.5) 2.75	(46) 2.59	(47) 2.82
Check eyes using the Snellen Chart	(65.5) 3.07	(25) 3.50	(31.5) 3.39	(35) 3.23	(21) 3.35	(25) 3.53
Test for color blindness	(68.5) 3.03	(34) 3.29	(52) 2.84	(19.5) 3.38	(27.5) 3.13	(36) 3.16
Review physician's instructions with the patient	(54) 3.24	(22) 3.60	(12) 4.03	(44.5) 3.14	(20) 3.40	(18) 3.73
Telephone prescriptions to pharmacy	(57.5) 3.17	(41) 3.05	(24) 3.61	(65) 2.63	(47.5) 2.56	(37) 3.14
Observe the physical characteristics of patient	(65.5) 3.07	(26) 3.44	(25) 3.57	(19.5) 3.38	(25) 3.17	(26) 3.47
Maintain a safe and controlled office environment	(17) 3.78	(23) 3.59	(9) 4.09	(26) 3.31	(23) 3.25	(15.5) 3.81
Maintain a quality control of reagents	(63) 3.13	(56) 2.66	(37) 3.21	(68) 2.60	(60) 2.17	(42.5) 3.00

* Rank Order

** Mean Response on a 5-point Likert scale when 5 points were awarded for each Extremely Important response, 4 points for Very Important, 3 points for Important, 2 points for Moderately Important and 1 point for Not Important

TABLE XV

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE OF THE NINE COGNITIVE DOMAIN STATEMENTS ACCORDING TO THE THREE POPULATIONS

DOCTORS

(1)*	4.23**	Stay within the limits of her training
(2)	4.13	Know medical terminology
(3)	4.00	Know medical law and ethics as pertains to the Medical Assistant
(4)	3.94	Know business English
(5)	3.45	Know First Aid and Emergency procedures for OSHA (Occupational Safety and Health Act) requirements
(6)	3.23	Know the common diseases and their effects on the body
(7.5)	3.16	Know body structure and function
(7.5)	3.16	Know how to use the PDR
(9)	2.65	Have a working knowledge of the metric system

CLINICS

(1)	4.58	Stay within limits of her training
(2)	4.29	Know medical terminology
(3)	4.16	Know medical law and ethics as pertains to the Medical Assistant
(4)	3.84	Know business English
(5)	3.73	Know body structure and function
(6)	3.62	Know First Aid and Emergency procedure for OSHA (Occupational Safety and Health Act) requirements
(7)	3.29	Know the common diseases and their effects on the body
(8)	3.00	Know how to use the PDR
(9)	2.73	Have a working knowledge of the metric system

GRADUATES

(1)	4.59	Know medical terminology
(2)	4.21	Know body structure and functions
(3)	4.20	Stay within the limits of her training
(4)	4.09	Know the common diseases and their effects on the body
(5)	4.06	Know First Aid and Emergency procedures for OSHA (Occupational Safety and Health Act) requirements
(6)	4.05	Know medical law and ethics as pertains to the Medical Assistant
(7)	3.75	Know business English
(8)	3.63	Know how to use the PDR
(9)	2.85	Have working knowledge of the metric system

* Rank Order

** Mean Response on a 5-point Likert Scale

TABLE XVI

RANK ORDER AND MEAN RESPONSE FOR THE LEVEL OF IMPORTANCE OF THE NINE COGNITIVE DOMAIN STATEMENTS ACCORDING TO THE RESPONSES OF THE THREE POPULATIONS

Statements	Level of Importance		
	PHYSICIANS	CLINICS	GRADUATES
Know Business English	(4)* 3.94**	(4) 3.84	(7) 3.75
Know medical terminology	(2) 4.13	(2) 4.29	(1) 4.59
Know how to use the PDR	(7.5) 3.16	(8) 3.00	(8) 3.63
Know medical law and ethics as pertains to the Medical Assistant	(3) 4.00	(3) 4.16	(6) 4.05
Know body structure and function	(7.5) 3.16	(5) 3.73	(2) 4.21
Know the common diseases and their effects on the body	(6) 3.23	(7) 3.29	(4) 4.09
Know First Aid and Emergency Procedures for OSHA (Occupational Safety and Health Act) requirements	(5) 3.45	(6) 3.62	(5) 4.06
Have a working knowledge of the metric system	(9) 2.65	(9) 2.73	(9) 2.85
Stay within the limits of her training	(1) 4.23	(1) 4.58	(3) 4.20

* Rank Order

** Mean Response on a 5-point Likert scale when 5 points were awarded for each Extremely Important response, 4 points for Very Important, 3 points for Important, 2 points for Moderately Important and 1 point for Not Important

COMMENTS

Doctors:

Many of the items listed, by law, should not be performed by anyone without an M.D.

. . .

It is important to have employees with good judgment, good secretarial training who can see what needs to be done and does it with little or no supervision.

Clinics:

Medical Assistants should never give medications what so ever.

. . .

In our multi-specialty group practice our Medical Assistants are required to be proficient only in the department to which they are permanently assigned.

. . .

A pleasant personality is a must, plus a genuine desire to help others.

. . .

The Medical Assistant is extremely valuable.

. . .

More intensive training to assist the physician in the office is necessary.

. . .

The Medical Assistants in our clinic become almost as specialized as the doctors they work for.

. . .

More medical terminology and telephone training.

Graduates:

The pay scale is so low after training.

. . .

I wish the Medical Assistant could be licensed.

. . .

I'm now going on to become an R.N. My Medical Assistant training was so helpful.

. . .

I'm using all I learned.

. . .

I love being a Medical Assistant. I'm glad my teacher made us learn.

. . .

I want more education.

. . .

It's a very rewarding career. The course could be longer.

. . .

I administer medications and do all my procedures without supervision. We carry a lot of responsibility ourselves.

Have certification offered immediately after finishing the course.

. . .

Very thorough questionnaire.

. . .

I am very honored to be part of this survey.

. . .

The Medical Assisting field is a very rewarding and challenging field. I have learned so much and I am so thankful for this training.

. . .

CHAPTER IV

CONCLUSIONS

The specific purpose of this study was to identify competencies required for entry-level positions in the Medical Assistant field.

The findings were based on responses from a random sample of Physicians, Clinics and employed Medical Assistant Graduates in Wisconsin.

In reviewing the findings the following determinations were made:

1. It is possible to compile a list of competencies needed by the Medical Assistant to function adequately in her field.
2. The solo or 2-man practice use the Medical Assistant in all areas of the office. She has to be versatile and flexible and must be able to function in the clerical, laboratory and clinical area.
3. The Medical Assistant in the small office is more likely to perform her duties with limited or no supervision.
4. The Medical Assistant in the clinic atmosphere is more specialized in her job. The clinic usually employes office, laboratory and X-ray personnel.
5. The Medical Assistant in a clinic is in a more supervised environment and many tasks are performed by the R.N. The Medical Assistant usually works in a specialized area.

RECOMMENDATIONS

The Medical Assistant may be trained in a formal educational setting or on the job. On the job training is a tradition of ages past. Today there is access to quality educational programs. Programs and curriculum are available to anyone who is interested in a career in some phase of medicine. The mechanism is there, and it must be promoted. Educational standards and competency determination are the beginning steps to licensure. Certification or licensure should be endorsed. This is not to enhance the ego of the Medical Assistant but to protect the patient. To the patient, anyone in a white uniform is qualified to provide medical care, either under direct or indirect supervision of a doctor. The Medical Assistant is the only member of the office team who isn't licensed by the state, though she works on human beings just as the Physician and the Registered Nurse. The patient doesn't know she may be untrained or have limited training and is not licensed.

One reason given for not licensing Medical Assistants is that they have no responsibility or liability toward the patient. That all falls on the physician. That is not true because everybody is responsible for his own conduct. The patient has the right to sue everyone involved with his treatment, the Medical Assistant as well as the physician. The Medical Assistant must be covered by malpractice insurance. The Medical Assistant may be protected by the physician's policy if she is actually listed by name in a rider. If not, she is running a greater risk than the physician.

The Medical Assistant is very much involved with direct patient care. She does all the first person patient contacts. She is personally involved and feels that the person is her patient as well as the physician's.

Low wages was cited as an important factor in the Medical Assistant's decision to work in fields not related to her training.

Some recommendations come to mind after study of the subject matter and the responses and comments to the questionnaire.

1. Further study into the subject of mandatory certification or licensure within a set number of years after graduation from an accredited program.
2. Further study into articulation between high school and VTAE schools concerning specific course offerings in high school to eliminate the need for them in the Vocational school Medical Assistant curriculum. This would enable the student to spend more time on clinical and laboratory procedures.
3. Further study to refine the present competency list so that the Medical Assistant will graduate with a set of skills relevant to her role in the changing medical field.
4. Further study of existing programs to keep up with the current trends in education.
5. Encourage physicians to employ people with proper credentials to work on human beings and to promote advanced training for their employees.

APPENDIX A

COVER LETTER AND INSTRUMENT

SENT TO PHYSICIANS

MID-STATE
VOCATIONAL, TECHNICAL & ADULT EDUCATION DISTRICT
Five Hundred 32nd Street North, Wisconsin Rapids, WI 54494
715/423-5650

March 1, 1976

Dr. Rudolph Jones
54494 Honey Creek Parkway
Wisconsin Rapids, WI 54494

Dear Dr. Jones:

Mid-State Vocational, Technical and Adult Education District is conducting a statewide survey for "Determining Competencies for Job Entry" for the Medical Assistant.

Because our schools are interested in providing employers with qualified graduates, your assistance is essential in developing and updating the curriculum for the program. The results of this survey will be provided to all of the Vocational-Technical Institutes throughout Wisconsin.

We realize that there are many demands on your time, but could you take just ten minutes to fill out the questionnaire and return it in the self-addressed, postage-paid envelope by March 19, 1976. Please understand that this is of vital importance to the Medical Assistant program in our schools. Your response is necessary in order for the survey to be as useful as possible.

All responses will be kept confidential and additional comments are welcome.

Thank you for your assistance in this very important effort.

If you have any questions about the survey, please call Max Farning, Ph.D., or Mrs. Mildred Lange, R.N., at 715-423-5650.

Sincerely,

Max Farning

Max Farning, Ph.D.
Research and Planning

Mildred Lange

Mrs. Mildred Lange, R.N.
Project Associate

MF:ML/jt

MEDICAL ASSISTANT COMPETENCY SURVEY

NAME OF YOUR HEALTH AGENCY _____

ADDRESS OF YOUR HEALTH AGENCY _____

POSITION OF PERSON COMPLETING THE QUESTIONNAIRE _____

YOUR NAME _____

In your opinion to what extent are the following competencies important to the Medical Assistant in your office/clinic. Also, what is the degree of proficiency needed to perform these tasks.

CLERICAL, SECRETARIAL, MANAGERIAL	Level of Importance: Please indicate by placing an X in one of the columns					Level of Proficiency: Please indicate by placing an X in one of the columns					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Answer telephone - place necessary calls											
Make appointments - cancel and reschedule appointments											
Greet patients - personalizing approach											
Interview and complete forms - start file for new patients - obtain necessary signatures for insurance											
Explain delays											
Review day's schedule with the physician											

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Make arrangements for hospital admittance - schedule surgeries											
Transcribe medical information to insurance forms											
Open and sort mail											
File medical records, EKG-ECG tracings, X-ray reports											
Maintain patient's medical records											
Receive and organize sample supplies											
Prepare and replenish supplies in physician's bag											
Operate business machines											
Receive and screen visitors and salesman											
Maintain proper housekeeping											
Maintain inventory of medical supplies, medications, and office supplies											
Maintain operating condition of medical and clerical equipment											
Maintain an office procedure manual											
Conduct orientation of new personnel											

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Prepare statistical reports											
Conduct library search for physician											
Prepare charge slips for patients											
Complete insurance forms for billing											
Make financial arrangements with patient and physician											
Collect payments at time of visit											
Mail bills to patients											
Post payments received											
Make bank deposits - balance account											
Maintain petty cash fund											
Maintain accounts receivable and accounts payable											
Prepare checks for physician's signature											
Prepare and maintain employee's payroll record											
Meet with doctor to discuss office problems/concerns											
Compose and type business letters											

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	EXPERT	VERY PROFICIENT	PROFICIENT	SOMEWHAT PROFICIENT	NOVICE	
Possess basic typing ability											
Make travel and housing arrangements											

DIAGNOSTIC TESTS AND PROCEDURES

Instruct patient regarding proper preparation for tests ordered by the physician												
Collect and/or instruct patient with regard to correct method of specimen collection												
Take proper care of collected specimen												
Send specimen to laboratory												
Perform tests for physical and chemical properties of urine												
Examine specimen microscopically												
Collect venous and capillary blood												
Prepare blood smears												

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Perform the following laboratory procedures:												
a. Differential Cell Count												
b. Sedimentation Rate												
c. Hematocrit and Hemoglobin												
d. Gram Stain												
e. Blood Sugar												
f. Prothrombin Time												
Clean, wrap and sterilize equipment, instruments and supplies												
Handle and store sterilized material												
Prepare, instruct and assist patient for EKG-ECG												
Take EKG-ECG readings												
Operate and maintain EKG-ECG machine												
Position and prepare patient for X-ray												
Take X-ray												
Develop X-ray												

EXAMINATION AND TREATMENT ROOM PROCEDURES	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Maintain adequate supplies in examination and treatment room												
Prepare basic equipment and supplies for routine physical examination												
Receive patient with personal approach												
Direct or assist patient with gowning and draping												
Position patient for diagnostic and/or treatment procedures and explain why they are necessary												
Take and record vital signs and height and weight												
Assist with minor surgery using sterile techniques												
Prepare equipment for special procedures, e.g. Procto - Bone Marrow - Lumbar puncture												
Dispose of contaminated and disposable items												
Perform the following procedures:												
a. Enemas												
b. O_2 administration												
c. Nose and throat spray												

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
d. Cast removal												
e. Proper bandaging												
f. Apply topical medications												
Assist with the following procedures:												
a. Proctoscopy												
b. Pelvic exam with smear or biopsy												
c. Lumbar puncture												
d. Bone marrow aspiration and/or biopsy												
e. Paracentesis												
f. Thoracentesis												
g. Casting												
Prepare and give injections under the direct supervision of the physician												
a. Immunization												
b. Allergy												

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
c. Vitamin												
Give medications as directed by the physician												
Check eyes using the Snellen Chart												
Test for color blindness												
Review physician's instructions with the patient												
Telephone prescriptions to pharmacy												
Observe the physical characteristics of patient												
Maintain a safe and controlled office environment												
Maintain a quality control of reagents												

CHECK THE LEVEL OF IMPORTANCE OF THE FOLLOWING STATEMENTS FOR THE MEDICAL ASSISTANT

	Level of Importance					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	
Know business English						
Know medical terminology						
Know how to use the PDR						
Know medical law and ethics as pertains to the Medical Assistant						
Know body structure and function						
Know the common diseases and their effects on the body						
Know First Aid and Emergency procedures for OSHA (Occupational Safety and Health Act) requirements						
Have a working knowledge of the metric system						
Stay within the limits of her training						

Comments and/or Additions:

91

90

March, 1976

APPENDIX B

COVER LETTER AND INSTRUMENT

SENT TO CLINICS

MID-STATE
VOCATIONAL, TECHNICAL & ADULT EDUCATION DISTRICT
Five Hundred 32nd Street North, Wisconsin Rapids, WI 54494
715/423-5650

March 1, 1976

Dear Doctor:

Mid-State Vocational, Technical and Adult Education District is conducting a statewide survey for "Determining Competencies for Job Entry" for the Medical Assistant.

Because our schools are interested in providing employers with qualified graduates, your assistance is essential in developing and updating the curriculum for the program. The results of this survey will be provided to all of the Vocational-Technical Institutes throughout Wisconsin.

We realize that there are many demands on your time, but could you take just ten minutes to fill out the questionnaire and return it in the self-addressed, postage-paid envelope by March 19, 1976. Please understand that this is of vital importance to the Medical Assistant program in our schools. Your response is necessary in order for the survey to be as useful as possible.

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Thank you for your assistance in this very important effort.

If you have any questions about the survey, please call Max Farning, Ph.D., or Mrs. Mildred Lange, R.N., at 715-423-5650.

Sincerely,

Max Farning

Max Farning, Ph.D.
Research and Planning

Mildred Lange

Mrs. Mildred Lange, R.N.
Project Associate

MF:ML/jt

MEDICAL ASSISTANT COMPETENCY SURVEY

NAME OF YOUR HEALTH AGENCY _____

ADDRESS OF YOUR HEALTH AGENCY _____

POSITION OF PERSON COMPLETING THE QUESTIONNAIRE _____

YOUR NAME _____

In your opinion to what extent are the following competencies important to the Medical Assistant in your office/clinic. Also, what is the degree of proficiency needed to perform these tasks.

CLERICAL, SECRETARIAL, MANAGERIAL	Level of Importance: Please indicate by placing an X in one of the columns					Level of Proficiency: Please indicate by placing an X in one of the columns				
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS
Answer telephone - place necessary calls										
Make appointments - cancel and reschedule appointments										
Greet patients - personalizing approach										
Interview and complete forms - start file for new patients - obtain necessary signatures for insurance										
Explain delays										
Review day's schedule with the physician										

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Make arrangements for hospital admittance - schedule surgeries											
Transcribe medical information to insurance forms											
Open and sort mail											
File medical records, EKG-ECG tracings, X-ray reports											
Maintain patient's medical records											
Receive and organize sample supplies											
Prepare and replenish supplies in physician's bag											
Operate business machines											
Receive and screen visitors and salesman											
Maintain proper housekeeping											
Maintain inventory of medical supplies, medications, and office supplies											
Maintain operating condition of medical and clerical equipment											
Maintain an office procedure manual											
Conduct orientation of new personnel											

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Prepare statistical reports											
Conduct library search for physician											
Prepare charge slips for patients											
Complete insurance forms for billing											
Make financial arrangements with patient and physician											
Collect payments at time of visit											
Mail bills to patients											
Post payments received											
Make bank deposits - balance account											
Maintain petty cash fund											
Maintain accounts receivable and accounts payable											
Prepare checks for physician's signature											
Prepare and maintain employee's payroll record											
Meet with doctor to discuss office problems/concerns											
Compose and type business letters											

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Possess basic typing ability												
Make travel and housing arrangements												

DIAGNOSTIC TESTS AND PROCEDURES

Instruct patient regarding proper preparation for tests ordered by the physician												
Collect and/or instruct patient with regard to correct method of specimen collection												
Take proper care of collected specimen												
Send specimen to laboratory												
Perform tests for physical and chemical properties of urine												
Examine specimen microscopically												
Collect venous and capillary blood												
Prepare blood smears												

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Perform the following laboratory procedures:											
a. Differential Cell Count											
b. Sedimentation Rate											
c. Hematocrit and Hemoglobin											
d. Gram Stain											
e. Blood Sugar											
f. Prothrombin Time											
Clean, wrap and sterilize equipment, instruments and supplies											
Handle and store sterilized material											
Prepare, instruct and assist patient for EKG-ECG											
Take EKG-ECG readings											
Operate and maintain EKG-ECG machine											
Position and prepare patient for X-ray											
Take X-ray											
Develop X-ray											

EXAMINATION AND TREATMENT ROOM PROCEDURES	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Maintain adequate supplies in examination and treatment room											
Prepare basic equipment and supplies for routine physical examination											
Receive patient with personal approach											
Direct or assist patient with gowning and draping											
Position patient for diagnostic and/or treatment procedures and explain why they are necessary											
Take and record vital signs and height and weight											
Assist with minor surgery using sterile techniques											
Prepare equipment for special procedures, e.g. Procto - Bone Marrow - Lumbar puncture											
Dispose of contaminated and disposable items											
Perform the following procedures:											
a. Enemas											
b. O_2 administration											
c. Nose and throat spray											

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
d. Cast removal												
e. Proper bandaging												
f. Apply topical medications												
Assist with the following procedures:												
a. Proctoscopy												
b. Pelvic exam with smear or biopsy												
c. Lumbar puncture												
d. Bone marrow aspiration and/or biopsy												
e. Paracentesis												
f. Thoracentesis												
g. Casting												
Prepare and give injections under the direct supervision of the physician												
a. Immunization												
b. Allergy												

	Level of Importance					Level of Proficiency				
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS
c. Vitamin										
Give medications as directed by the physician										
Check eyes using the Snellen Chart										
Test for color blindness										
Review physician's instructions with the patient										
Telephone prescriptions to pharmacy										
Observe the physical characteristics of patient										
Maintain a safe and controlled office environment										
Maintain a quality control of reagents										

CHECK THE LEVEL OF IMPORTANCE OF THE FOLLOWING STATEMENTS FOR THE MEDICAL ASSISTANT

	Level of Importance					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	
Know business English						
Know medical terminology						
Know how to use the PDR						
Know medical law and ethics as pertains to the Medical Assistant						
Know body structure and function						
Know the common diseases and their effects on the body						
Know First Aid and Emergency procedures for OSHA (Occupational Safety and Health Act) requirements						
Have a working knowledge of the metric system						
Stay within the limits of her training						

Comments and/or Additions:

APPENDIX C

COVER LETTER AND INSTRUMENT

SENT TO GRADUATES

MID-STATE
VOCATIONAL, TECHNICAL & ADULT EDUCATION DISTRICT
Five Hundred 32nd Street North, Wisconsin Rapids, WI 54494
715/423-5650

March 1, 1976

Dear Medical Assistant:

Mid-State Vocational, Technical and Adult Education District is conducting a statewide survey for "Determining Competencies for Job Entry" for the Medical Assistant.

As a graduate of a Medical Assistant program, you are in a unique position to provide us with very pertinent information.

Because our schools are interested in providing employers with qualified graduates, your assistance is essential in developing and updating the curriculum for the program. Only you can tell us if our present programs are fulfilling the students' needs in preparing them for job entry.

Would you please take ten minutes from your busy schedule to complete the questionnaire and return it in the self-addressed, postage-paid envelope by March 19, 1976.

All responses will be kept confidential and additional comments are welcome.

Thank you for your assistance in this very important effort.

If you have any questions about the survey, please call Max Farning, Ph.D., or Mrs. Mildred Lange, R.N., at 715-423-5650.

Sincerely,

Max Farning

Max Farning, Ph.D.
Research and Planning

Mildred Lange

Mrs. Mildred Lange, R.N.
Project Associate

MF:ML/jt

MEDICAL ASSISTANT COMPETENCY SURVEY

NAME OF YOUR HEALTH AGENCY _____

ADDRESS OF YOUR HEALTH AGENCY _____

POSITION OF PERSON COMPLETING THE QUESTIONNAIRE _____

YOUR NAME _____

In your opinion to what extent are the following competencies important to the Medical Assistant in your office/clinic. Also, what is the degree of proficiency needed to perform these tasks.

CLERICAL, SECRETARIAL, MANAGERIAL	Level of Importance: Please indicate by placing an X in one of the columns					Level of Proficiency: Please indicate by placing an X in one of the columns				
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS
Answer telephone - place necessary calls										
Make appointments - cancel and reschedule appointments										
Greet patients - personalizing approach										
Interview and complete forms - start file for new patients - obtain necessary signatures for insurance										
Explain delays										
Review day's schedule with the physician										

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Prepare statistical reports												
Conduct library search for physician												
Prepare charge slips for patients												
Complete insurance forms for billing												
Make financial arrangements with patient and physician												
Collect payments at time of visit												
Mail bills to patients												
Post payments received												
Make bank deposits - balance account												
Maintain petty cash fund												
Maintain accounts receivable and accounts payable												
Prepare checks for physician's signature												
Prepare and maintain employee's payroll record												
Meet with doctor to discuss office problems/concerns												
Compose and type business letters												

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Possess basic typing ability												
Make travel and housing arrangements												

DIAGNOSTIC TESTS AND PROCEDURES

Instruct patient regarding proper preparation for tests ordered by the physician													
Collect and/or instruct patient with regard to correct method of specimen collection													
Take proper care of collected specimen													
Send specimen to laboratory													
Perform tests for physical and chemical properties of urine													
Examine specimen microscopically													
Collect venous and capillary blood													
Prepare blood smears													

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Perform the following laboratory procedures:											
a. Differential Cell Count											
b. Sedimentation Rate											
c. Hematocrit and Hemoglobin											
d. Gram Stain											
e. Blood Sugar											
f. Prothrombin Time											
Clean, wrap and sterilize equipment, instruments and supplies											
Handle and store sterilized material											
Prepare, instruct and assist patient for EKG-ECG											
Take EKG-ECG readings											
Operate and maintain EKG-ECG machine											
Position and prepare patient for X-ray											
Take X-ray											
Develop X-ray											

EXAMINATION AND TREATMENT ROOM PROCEDURES	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	ASSISTS OTHERS	
Maintain adequate supplies in examination and treatment room												
Prepare basic equipment and supplies for routine physical examination												
Receive patient with personal approach												
Direct or assist patient with gowning and draping												
Position patient for diagnostic and/or treatment procedures and explain why they are necessary												
Take and record vital signs and height and weight												
Assist with minor surgery using sterile techniques												
Prepare equipment for special procedures, e.g. Procto - Bone Marrow - Lumbar puncture												
Dispose of contaminated and disposable items												
Perform the following procedures:												
a. Enemas												
b. O_2 administration												
c. Nose and throat spray												

	Level of Importance						Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT		CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	CONSTANT SUPERVISION	NEEDS OTHERS	
d. Cast removal												
e. Proper bandaging												
f. Apply topical medications												
Assist with the following procedures:												
a. Proctoscopy												
b. Pelvic exam with smear or biopsy												
c. Lumbar puncture												
d. Bone marrow aspiration and/or biopsy												
e. Paracentesis												
f. Thoracentesis												
g. Casting												
Prepare and give injections under the direct supervision of the physician												
a. Immunization												
b. Allergy												

	Level of Importance					Level of Proficiency					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	CAN LEAD OTHERS	WITHOUT SUPERVISION	LIMITED SUPERVISION	QUITE A BIT OF SUPERVISION	NEEDS SUPERVISION	
c. Vitamin											
Give medications as directed by the physician											
Check eyes using the Snellen Chart											
Test for color blindness											
Review physician's instructions with the patient											
Telephone prescriptions to pharmacy											
Observe the physical characteristics of patient											
Maintain a safe and controlled office environment											
Maintain a quality control of reagents											

CHECK THE LEVEL OF IMPORTANCE OF THE FOLLOWING STATEMENTS FOR THE MEDICAL ASSISTANT

	Level of Importance					
	EXTREMELY IMPORTANT	VERY IMPORTANT	IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT	
Know business English						
Know medical terminology						
Know how to use the PDR						
Know medical law and ethics as pertains to the Medical Assistant						
Know body structure and function						
Know the common diseases and their effects on the body						
Know First Aid and Emergency procedures for OSHA (Occupational Safety and Health Act) requirements						
Have a working knowledge of the metric system						
Stay within the limits of her training						

Comments and/or Additions:

APPENDIX D

FOLLOW-UP LETTER

SENT TO PHYSICIANS

MID-STATE
VOCATIONAL, TECHNICAL & ADULT EDUCATION DISTRICT
Five Hundred 32nd Street North, Wisconsin Rapids, WI 54494
715/423-5650

March 19, 1976

Dear Doctor:

Remember that blue Medical Assistant Competency Survey that you put aside for completing at a later date?

The developing and updating of the Medical Assistant curriculum will be based on your answers. Therefore, it is important that your response be included in the study. Would you please complete it and return it as soon as possible?

Please accept my thanks if it is already in the mail.

If you have any questions please call Mrs. Mildred Lange, R.N. at 715-423-5650.

Sincerely,

Mildred Lange

Mrs. Mildred Lange, R.N.
Project Associate

ML/jt

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